

Utah State University

DigitalCommons@USU

All Graduate Theses and Dissertations

Graduate Studies

5-1979

Leisure Orientation and Outdoor Recreation Participation of Selected Occupational Groups in Utah

S. Craig Campbell
Utah State University

Follow this and additional works at: <https://digitalcommons.usu.edu/etd>



Part of the [Sociology Commons](#)

Recommended Citation

Campbell, S. Craig, "Leisure Orientation and Outdoor Recreation Participation of Selected Occupational Groups in Utah" (1979). *All Graduate Theses and Dissertations*. 3266.
<https://digitalcommons.usu.edu/etd/3266>

This Dissertation is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



LEISURE ORIENTATION AND OUTDOOR RECREATION PARTICIPATION
OF SELECTED OCCUPATIONAL GROUPS IN UTAH

by

S. Craig Campbell

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Sociology

UTAH STATE UNIVERSITY
Logan, Utah

1979

378.242
C1532
e. 2

ACKNOWLEDGEMENTS

The author wishes to thank his committee for their continued encouragement in this research effort. Dr. Therel Black and Dr. Wade Andrews offered encouragement throughout the course of my studies at Utah State University. Dr. Gary Madsen assisted me greatly by providing the overall direction for my dissertation work, with Dr. Bart Sensening also helping me with the analysis. Dr. Richard Schreyer and Dr. Kent Downing were most helpful in providing the input with respect to the recreation considerations in this study. Lastly, I am totally grateful to my wife Kari and our children who sacrificed their leisure time while I worked on this effort.

S. Craig Campbell
S. Craig Campbell

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	v
LIST OF FIGURES	xi
ABSTRACT	xii
Chapter	
I. INTRODUCTION	1
Nature of the Problem	3
Statement of the Problem	5
The Importance of the Study	9
II. REVIEW OF LITERATURE	12
Leisure	12
Summary of Leisure Studies	19
Recreation	20
Summary of Recreation Behavior	25
Occupation and Related Influences	26
Education	26
Age	28
Income	28
Occupation	29
Summary of Occupational Literature	43
Statement of Hypotheses	44
Definition of Terms	45
III. METHODOLOGY	47
Leisure Orientation Scale	47
Water-Based Outdoor Recreation Participation	52
Occupational Breakdown	55
Study Hypotheses	57
The Sample	59

TABLE OF CONTENTS (Continued)

	Page
Setting of the Study	60
Data Collection	61
Data Analysis	62
IV. DATA ANALYSIS AND FINDINGS	64
Findings of Leisure Orientations and Selected Recreation Activities	64
Findings of Water Based Outdoor Recreation Activities and Occupation	80
Findings of Factor Analysis of the Water Based Outdoor Recreation Activities and Levels of Enjoyment	108
V. SUMMARY AND CONCLUSIONS	114
Summary	114
Conclusions	124
Consideration for Future Research	129
Limitations of this Study	129
BIBLIOGRAPHY	131
APPENDIX	136
VITA	165

LIST OF TABLES

Table	Page
1. Item-to-Total Score Correlations for the 11-Item Leisure-Orientation Scale	49
2. Leisure Orientation Scores by Total Respondents, Including Nonfarm and Farm Samples	65
3. Leisure Orientation Scores by Grouped Occupations, Including Nonfarm and Farm Samples	66
4. Leisure Orientation Scores by Occupation, for the Nonfarm Sample	67
5. Leisure Orientation Scores by Occupation, for the Farm Sample	67
6. Leisure Orientation Ranking by Occupation, for the Nonfarm Sample	68
7. Leisure Orientation Ranking by Occupation, for the Farm Sample	69
8. Preferred Outdoor Recreation Activity if the Individual had 3 Hours of Additional Leisure Time Daily, by all Respondents, both Nonfarm and Farm Samples	71
9. Preferred Outdoor Recreation Activity if the Individual had 3 Hours of Additional Leisure Time Daily, by Grouped Occupations	71
10. Preferred Outdoor Recreation Activity if the Individual had 3 Hours of Additional Leisure Time Daily, by Occupation, for the Nonfarm Sample	72
11. Preferred Outdoor Recreation Activity if the Individual had 3 Hours of Additional Leisure Time Daily, by Occupation, for the Farm Sample	72

LIST OF TABLES (Continued)

Table	Page
12. Preferred Outdoor Recreation Activity if the Individuals had 3 Days Off in a Row, by all Respondents, both Nonfarm and Farm Samples	74
13. Preferred Outdoor Recreation Activity if the Individuals had 3 Days Off in a Row, by Grouped Occupations	74
14. Preferred Outdoor Recreation Activity if the Individual had 3 Days Off in a Row, by Occupation, for the Nonfarm Sample	75
15. Preferred Outdoor Recreation Activity if the Individual had 3 Days Off in a Row, by Occupation, for the Farm Sample	75
16. Outdoor Recreation Activity Participated in Most during the Year by all Respondents, both Nonfarm and Farm Samples	77
17. Outdoor Recreation Activity Participated in Most during the Year by Grouped Occupations, both Nonfarm and Farm Samples	78
18. Outdoor Recreation Activity Participated in Most during the Year, by Occupation, for the Nonfarm Sample	79
19. Outdoor Recreation Activity Participated in Most during the Year, by Occupation, for the Farm Sample	79
20. Rank Order of Outdoor Recreation Activities by Grouped Occupations, both Preferred and Actual Activities. Includes Nonfarm and Farm Sample	81
21. Rank Order of Outdoor Recreation Activities by Occupation, of Preferred Leisure Activities. Includes Nonfarm and Farm Sample	82

LIST OF TABLES (Continued)

Table	Page
22. Rank Order of Outdoor Recreation Activities by Occupation, of Actual Activities over One Year Period. Includes Nonfarm and Farm Sample	83
23. Participation in a Fishing Activity over a One Year Period by Total Respondents, Grouped Occupations, and Occupation, with 1=Weekly Participation and 5=No Participation. Includes Nonfarm and Farm Samples	85
24. Level of Enjoyment of the Fishing Activity by the Total Respondents, Grouped Occupations, and Occupation, with 1=Least Enjoyment and 5=Most Enjoyment of the Activity. Includes Nonfarm and Farm Samples	86
25. Participation in a Swimming Activity over a One Year Period by Total Respondents, Grouped Occupations, and Occupation, with 1=Weekly Participation and 5=No Participation. Includes Nonfarm and Farm Samples	87
26. Level of Enjoyment of the Swimming Activity by the Total Respondents, Grouped Occupations, and Occupation, with 1=Least Enjoyment and 5=Most Enjoyment of the Activity. Includes Nonfarm and Farm Samples	88
27. Participation in a Hunting Activity over a One Year Period by Total Respondents, Grouped Occupations, and Occupation, with 1=Weekly Participation and 5=No Participation. Includes Nonfarm and Farm Samples	89
28. Level of Enjoyment of the Hunting Activity by the Total Respondents, Grouped Occupations, and Occupation, with 1=Least Enjoyment and 5=Most Enjoyment of the Activity. Includes Nonfarm and Farm Samples	90

LIST OF TABLES (Continued)

Table	Page
29. Participation in a Boating Activity over a One Year Period by Total Respondents, Grouped Occupations, and Occupation, with 1=Weekly Participation and 5=No Participation. Includes Nonfarm and Farm Samples	91
30. Level of Enjoyment of the Boating Activity by the Total Respondents, Grouped Occupations, and Occupation, with 1=Least Enjoyment and 5=Most Enjoyment of the Activity. Includes Nonfarm and Farm Samples	92
31. Participation in a Water Skiing Activity over a One Year Period by Total Respondents, Grouped Occupations, and Occupation, with 1=Weekly Participation and 5=No Participation. Includes Nonfarm and Farm Samples	93
32. Level of Enjoyment of the Water Skiing Activity by the Total Respondents, Grouped Occupations, and Occupation, with 1=Least Enjoyment and 5=Most Enjoyment of the Activity. Includes Nonfarm and Farm Samples	94
33. Participation in a Picnicking Activity over a One Year Period by Total Respondents, Grouped Occupations, and Occupation, with 1=Weekly Participation and 5=No Participation. Includes Nonfarm and Farm Samples	95
34. Level of Enjoyment of the Picnicking Activity by the Total Respondents, Grouped Occupations, and Occupation, with 1=Least Enjoyment and 5=Most Enjoyment of the Activity. Includes Nonfarm and Farm Samples	96
35. Participation in a Camping Activity over a One Year Period by Total Respondents, Grouped Occupations, and Occupation, with 1=Weekly Participation and 5=No Participation. Includes Nonfarm and Farm Samples	97

LIST OF TABLES (Continued)

Table	Page
36. Level of Enjoyment of the Camping Activity by the Total Respondents, Grouped Occupations, and Occupation, with 1=Least Enjoyment and 5=Most Enjoyment of the Activity. Includes Nonfarm and Farm Samples	98
37. Participation in a Sightseeing Activity over a One Year Period by Total Respondents, Grouped Occupation, and Occupation, with 1=Weekly Participation and 5=No Participation. Includes Nonfarm and Farm Samples	99
38. Level of Enjoyment of the Sightseeing Activity by the Total Respondents, Grouped Occupations, and Occupation, with 1=Least Enjoyment and 5=Most Enjoyment of the Activity. Includes Nonfarm and Farm Samples	100
39. Rank Order of Participation in Reservoir Related Recreation Activities and Activity Enjoyment by <u>all Respondents</u> , Including Nonfarm and Farm Samples	102
40. Rank Order of Participation in Reservoir Related Recreation Activities and Activity Enjoyment by <u>Grouped Occupations</u> , Including Nonfarm and Farm Samples	103
41. Rank Order of Participation in Reservoir Related Recreation Activities and Activity Enjoyment by <u>Professionals</u> , Including Nonfarm and Farm Samples	104
42. Rank Order of Participation in Reservoir Related Recreation Activities and Activity Enjoyment by <u>Managers</u> , Including Nonfarm and Farm Samples	105
43. Rank Order of Participation in Reservoir Related Recreation Activities and Activity Enjoyment by <u>Laborers</u> , Including Nonfarm and Farm Samples	106

LIST OF TABLES (Continued)

Table	Page
44. Factor Analysis of Participation in Reservoir Related Activities by the Nonfarm Sample	109
45. Factor Analysis of Participation in Reservoir Related Activities by the Farm Sample	110
46. Factor Analysis of Enjoyment of Reservoir Related Activities by the Nonfarm Sample	111
47. Factor Analysis of Enjoyment of Reservoir Related Activities by the Farm Sample	112

LIST OF FIGURES

Figure	Page
1. The Weber Basin Project Area and Selected System Features	2

ABSTRACT

Leisure Orientations and Outdoor Recreation

Participation of Selected Occupations

in Utah

by

S. Craig Campbell, Doctor of Philosophy

Utah State University, 1979

Major Professor: Dr. Therel Black

Dissertation Advisor: Dr. Gary Madsen

Department: Sociology

This study was concerned with the investigation of both the leisure orientation and the outdoor recreation participation of two samples of Utah residents. One sample consisted in part of Professional, Manager and Laborer nonfarm respondents. The other sample consisted of farm respondents, who were both full and part-time farmers. The part-time farmers also held other full-time Professional, Manager and Laborer occupations. The author had three major objectives in this study: (1) to examine the leisure orientation of the respondents from an occupational perspective; (2) to examine the participation in outdoor recreation activities from an occupational perspective; and (3) to examine the enjoyment level of the outdoor recreation activity also from an occupational perspective.

Four hypotheses were formed. These were: (1) nonfarm respondents will be more leisure oriented than farm respondents; (2) nonfarm Professionals will have high participation rates in outdoor recreation activities; (3) nonfarm Managers will have high participation rates in outdoor recreation activities; and (4) nonfarm Laborers will have low participation rates in outdoor recreation activities.

Leisure orientation was measured by a modified Burdge leisure orientation scale. The citations for validity and reliability of the scale are indicated in the study. The measures of outdoor recreation participation in various activities and the level of enjoyment of the activity are defined operationally.

Two of the four hypotheses were supported by the data. The first hypothesis was supported that nonfarm respondents will be more leisure oriented than farm respondents. A mean score of 20.6 was found for the nonfarm respondents and a mean score of 18.6 was found for the farm respondents.

The second and third hypotheses were not supported by the data. That is, the nonfarm Professional and Manager were not found to have "high" participation rates in outdoor recreation activities as defined operationally.

The fourth hypothesis was found to be supported, with the nonfarm Laborers having "low" outdoor recreation participation rates as defined operationally.

CHAPTER I

INTRODUCTION

The purpose of this study is to examine the leisure orientations and water-based outdoor recreation participation rates of two independent samples. One sample was composed of respondents who were full-time and part-time farmers (those who also work in another occupation). The second sample consisted of respondents who work in various occupations other than farming. Leisure orientation is defined as the value that an individual holds toward leisure relative to work. Water-based outdoor recreation participation refers to a specific activity which takes place at or adjacent to reservoirs. Specifically, this study will focus on the occupational differences among the respondents sampled which will be examined with specific orientations toward leisure and actual water-based outdoor recreation participation rates at reservoirs of the Weber Basin Project, between North Salt Lake City and North Ogden, Utah (see Figure 1).

The contribution of this study is that it will go beyond previous research efforts by examining occupational breakdown of these two samples (one with a farming influence and one without), to identify similarities as well as differences with respect to both leisure orientation and recreation participation rates of the respondents. Trends in these two areas may be identified with respect to these occupational differences.

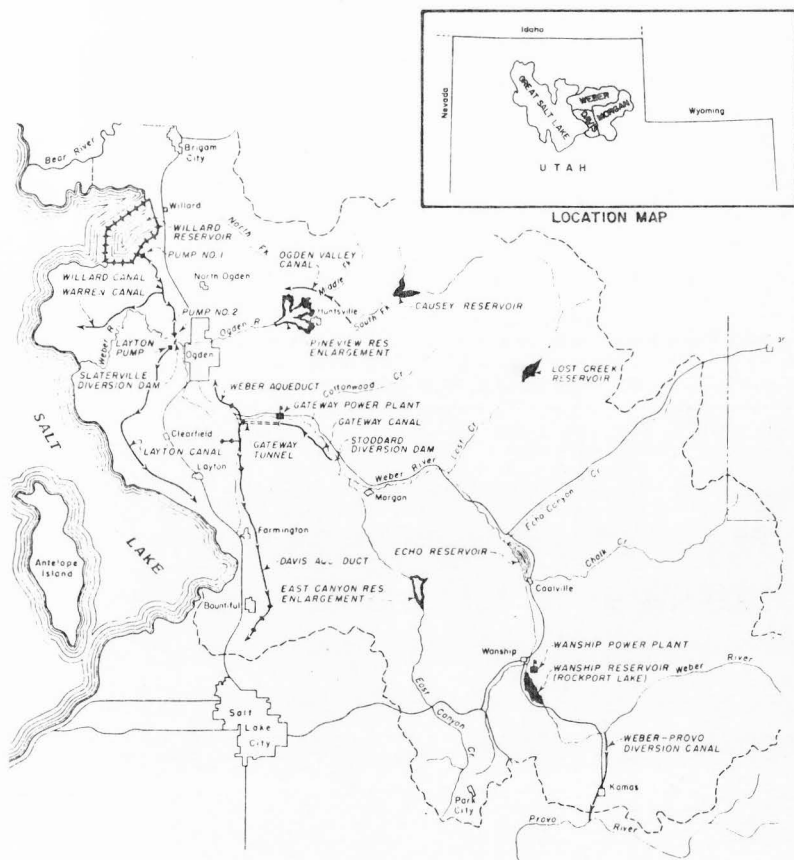


Figure 1. The Weber Basin Project Area and Selected System Features.
(Andrews, Madsen and Legaz 1974, p. 3)

Nature of the Problem

The assessment of the work-leisure continuum with spill-over and compensatory recreation activities has been the object of intense and comprehensive research efforts for the past several years. Examples include: Dubin (1956), Clark (1956), Riesman (1958), Orzack (1959), Wilensky (1960), Gerstl (1961), Berger (1962), Meyersohn (1969), Cunningham et al. (1970), Lindsay and Ogle (1972), Neulinger and Raps (1972), Dumazedier (1974), Zuzanek (1974), and White (1975).

Sociologically, the issue of various occupational uses of leisure time for recreation pursuits is a central concern with respect to individual lifestyles and an ever changing quality of life. Historically, a subtle shift seems to have taken place with respect to man's views of work, coupled with an increase in leisure time, often resulting in more varied and active leisure pursuits (Berger 1962).

These active pursuits are somewhat related to an individual's occupation, education and income. The effects of education, income and even age have been well documented (see Crandall et al 1977). However, the influences of an individual's occupation on leisure orientation and outdoor recreation are less known.

Davis (1949) has noted that the basic social ordering of Western society is firmly established in a religio-moral integration of individual pursuits of common ultimate interests and values (ends) which take place in a

social action framework, with the work ethic being one central integrating factor in maintaining social order. This has resulted from individual actors pursuing common-ultimate ends through a religio-moral value consensus of the importance and usefulness of work per se.

However, more recently Berger (1962) has claimed that the work ethic has lost and continues to lose much of its essential moral content. Some of that loss is attributed to the alienating factors of the industrialization process (Dubin 1956) and possibly by the reduction of the work week, resulting in increased leisure time. Berger also claimed that the moral orientation and reverence once attributed to work and the work ethic is shifting to leisure pursuits such as recreation activities. One reason for this shift is that the Western social systems require certain lower class job performance in the work arena, but do not provide the necessary status with accompanying self-worth and self-esteem which could be associated with that job. An example of this would be the garbage collector, who serves a necessary performance and function in the social system, and possibly acquires adequate financial reward, but who does not receive high enough or adequate status because of the way society judges the nature of his work. Thus workers may turn to leisure and recreation as a means of obtaining enjoyment and self-worth that can result from the recreation experience.

The possible preferences for a "leisure ethic" and outdoor recreation activities are of interest sociologically. If the trend toward leisure is taking

taking place as Berger notes, the understanding of which individuals are most active and oriented to these leisure pursuits would prove useful to sociology and related disciplines. For example, if certain occupational subgroups are becoming more active in leisure uses, or if the subgroup as a whole has similar interests and participation in outdoor recreation, trends and possible projections could be made. The most accessible and inter-related factors examined in the past have been occupation, education, income and age (Owens 1970; White 1975 and Zelman 1976).

Statement of the Problem

Berger's (1962) identification of a possible shifting base of society from a once highly valued work ethic to an increasingly valued leisure ethic does present highly relevant issues to be examined and studied by social scientists. Specifically, what are the social implications if individuals value leisure more than work? What implications will this have for individuals seeking various occupational careers?

Research has clearly shown that uses of leisure time for outdoor recreation are becoming increasingly more important to American society (Outdoor Recreation Resource Review Commission Reports [hereafter referred to as ORRRC Reports] 1962) and that Utah residents pursue outdoor recreation more actively than most other areas of the U.S., on the average (Richardson and Perry 1966).

This current research effort is to examine the preference for leisure or work, the water-based outdoor recreation activities pursued, as well as the enjoyment rating of such activities. This is to be done by using specific occupations as the focal point in examining the areas previously mentioned. The attempt will be to identify more clearly what occupational subgroups prefer leisure or work, as well as which groups recreate the most and in what activities. This understanding would then be useful to formulate possible trends and projections about specific occupations, with respect to leisure and recreation.

Theoretical and empirical considerations of an individual's occupation or work and non-work interests seems to be divided into two main areas (Wilensky 1960). One emphasis has been that work or occupation per se produce "spill-over" aspects into how individuals use time away from work. Specifically, the assumption is made that work is the main influence in an individual's life and as such tends to spill-over or carry over into the non-work leisure pursuits or activities. Thus if the work experience involves reading and research for a college professor for example, leisure time pursuits may also be centered on reading etc. Or if the occupation and work experience involves the use of mechanical equipment for example, leisure time pursuits may involve the use of sports equipment etc.

On the other hand, the other consideration of work and non-work aspects is that individuals tend to "compensate" and seek self-fulfillment not found in work by pursuing more fulfilling non-work activities. They

attempt to find gratification and a pleasant experience outside or away from work because of the possible alienating factors sometimes associated with work and the occupational structure.

Therefore, the pursuit of leisure and outdoor recreation activities may provide satisfactions to participants which are 1) a continuation of the work experience, or 2) provide satisfactions which are not found in the process of work, or at least may be more satisfying to participants than work per se.

Because of these two overriding theoretical considerations, specific research is needed to help clarify this issue. The intent of this study is to make a contribution to this area. This is to be accomplished by examining specific occupations as possible subgroup areas, with respect to leisure orientation and recreation participation.

Therefore, this study has two major objectives:

1. To examine the leisure orientation of three subgroups:

Professional, Manager and Laborer respondents. This emphasis will focus on the work or leisure preferences for these individuals. Both the nonfarm and farm samples will be examined. This may help differentiate possible differences due to factors closely associated to this occupational breakdown.

2. To compare the participation rates and levels of enjoyment in water-based outdoor recreation activities among the three subgroups within the farm and nonfarm samples. These are

both quantitative and qualitative measures made of the Professional, Manager and Laborer respondents. This determination will also attempt to sort out the nonfarm and farm influences.

Organization of the Study

This study will examine data collected by Andrews, Madsen and Legaz (1974) consisting of two samples of household heads: a nonfarmer sample and a farmer and part-time farmer sample. The nonfarmers were all urban or suburban residents. The part-time and full-time farmers resided in both urban as well as rural areas.

The nonfarm sample consisted of a random area probability sample of 250 household heads taken from the 1970 Ogden, Utah Urbanized Area of the U.S. Census from Weber and Davis Counties, including Farmington, Utah in North Davis County. This entire area contained approximately 43,000 households.

The farm sample consisted of a simple random sampling of 128 households who operated farm land identified from lists provided by the Agricultural Stabilization and Conservation Service, U.S.D.A. for both Weber and Davis Counties. Approximately 2000 farm land operators, both full and part-time, were included in the list.

This study will examine the occupation of the household heads to determine corresponding leisure orientations and water-based outdoor

recreation participation rates at various reservoirs of the Weber Basin Project, situated between North Salt Lake City and North Ogden, Utah.

The relationships among occupation, leisure orientations, and water-based outdoor recreation participation will be investigated from various perspectives. For example:

1. Is there a meaningful association between occupational characteristics and leisure orientation?
2. Is there a meaningful association between occupational characteristics and water-based outdoor recreation participation rates?
3. What is the relationship between leisure orientations (values) and water-based outdoor recreation participation rates (behavior)?
4. Do nonfarm households differ significantly from farmers in their leisure orientations and recreation participation rates?
5. How important is leisure and selected recreation activities in the lives of Utah residents sampled?

The Importance of the Study

The study of the relationships between occupation, leisure orientations and water-based outdoor recreation participation is of significant importance toward understanding the impacts of occupations on lifestyles.

That is, do distinct occupational subgroups, such as professional, manager, etc., recreate differently? Do they have similar or differing viewpoints when it comes to leisure uses? In addition, does a farm influence have any discernable impact in these areas? This study will attempt to give additional light and answers to these questions.

It would also be both useful and important theoretically to know if occupational subgroups have similar or differing activity rates in various outdoor recreation pursuits, as well as determine what enjoyments in these activities are associated with which occupational subgroups.

Richardson and Peery's (1966) study of the demand for outdoor recreation in Utah noted that Utah residents have higher outdoor recreation participation rates on the average than in most other areas of the U.S. Richardson and Peery (1966) also noted the importance of determining various predictive factors of preferences for recreation:

In order to convert present-day recreation habits and attitudes into a vehicle by which future needs may be determined, a second step is necessary--to identify the factors which govern or determine present-day recreation habits or attitudes. Identification of the determinants of present demand then makes it possible to project trends of significant factors and to begin to forecast the nature of outdoor recreational demand for future years). (p. xiii)

This current study would then be of practical importance to help understand which occupational subgroups have a higher value and use of outdoor recreation. The relationships of occupation and values toward leisure are somewhat lacking in current research (ORRRC 1962; Ownes 1970; White 1975).

In addition, and important theoretically, this particular study will focus on leisure orientation, outdoor recreation participation and occupation, not primarily leisure per se (a more abstract concept) and occupation. That is, most previous studies have dealt with a complex and often undefined set of variables labeled leisure preferences, leisure uses etc., and occupation.

This particular effort then will focus on not only specific occupational subgroups, such as Professional, Manager and Laborer, but will also consider the impact of related full or part-time farm influences. Thus not only will specific occupations be identified, but also qualitative and quantitative measures will be examined with reference to specific water-based outdoor recreation participation and leisure orientation.

This may therefore lead to discernable theoretical insights with respect to occupations, significantly going beyond existing occupation-leisure theory and research. For example, do occupational subgroups differ or share similar views of use of leisure time? Also do these occupational subgroups recreate the same or do meaningfully significant differences exist?

Thus possible trends, projections and limited generalizations may be forthcoming which would prove both useful and highly interesting to current researchers and theorists.

CHAPTER II

REVIEW OF LITERATURE

The literature relating to this study was reviewed in two main steps. First, general theorizing efforts in Leisure and Recreation Behavior were reviewed, including research efforts relating to these overall areas.

Secondly, a review of literature concerning specific research in the areas of Occupation and related influences was made with respect to leisure and recreation activity.

Leisure

The concept of Leisure has been the object of hundreds of articles and research efforts (Crandall et al. 1977) over the past few years. It has often overlapped into research of outdoor recreation, considering the purposes, principles and uses of leisure. The leisure continuum ranges from views of leisure as being the "essence" of life to a more recent consideration of leisure as being an essential non-work component that is often expressed through outdoor recreation (Clawson and Knetsch 1966).

Hosts of studies have attempted to assess the general concept of leisure (Larrabee and Meyersohn 1958, Havinghurst and Feigenbaum 1959, Kaplan 1960, Kleemeir 1961, Wilensky 1961, de Grazia 1962, Berger 1962, Charlesworth 1964, Green 1964, Meyersohn 1969, Parker 1971, Dumazedier 1974, Cheek and Burch 1976, and Martin 1975), as well as determine specific

measurable orientations toward leisure (Burdge 1961a, Neulinger and Breit 1969, Hendee 1971, and Neulinger and Raps 1972).

Of several considerations on this historical development of leisure, de Grazia's (1962) work is considered by this author to be the most indepth and complete. His approach to the study of leisure reviewed the emphasis of Greek culture with leisure being the essence and object of life, and traces these influences through the Roman civilization and later into the Christian era. He also noted the role and impact of work historically, concluding his effort of showing the work-leisure relationship to be vital, with the work ethic taking the predominant position, and leisure following.

Leisure, given its proper political setting, benefits, gladdens, and beautifies the lives of all. It lifts up all heads from practical workday life to look at the whole high world with refreshed wonder. The urge to celebrate is there. (de Grazia 1962, p. 435)

Approximately the same time, Berger (1962) provided equally classical insights with respect to leisure, taking a more sociological perspective. He noted a need exists to confront and understand the "problem of leisure," to be aware of the implications of the disposition of free time.

Berger examined the notions of 1. free time, 2. classical views of leisure and 3. Protestant views of the work ethic. His main conclusion and contribution to the understanding of leisure was that the concept of leisure must be a normative one, tied to particular cultures and traditions. "The meanings of work and leisure are unextricably related both to each

other and to the cultural norms which define their moral place in a social order." (Berger 1962, p. 35)

Summarizing the historical development of leisure, Berger drew a conclusion that we are all in principle, compromised Greek citizens, who carry the burden of compromised Protestant ethics, that is seeing leisure as a value per se, while attempting to adapt to a normative work ethic.

Leisure refers to those actions whose normative context renders them most important to us, those things that we want to do for their own sake or those things that we feel ethically constrained to do. (Berger 1962, p. 38)

Berger noted that the work ethic has lost much of its moral content however, with individuals looking to leisure as a social replacement. That is, looking away from work, occupations and careers to another moral involvement as members of society.

He noted this shift has occurred because of existing inconsistencies between what our social system requires in the various forms of work, occupations, etc., and what our social value systems prescribe. Our society needs various occupations, but doesn't often provide the necessary accompanying status. Thus the moral context of work is fading, with leisure gaining a more valued position in society, according to Berger (1962).

As work loses its power to command the moral identifications and loyalties of men, as men look away from work to find moral experience, society loses an important source of normative integration. (p. 44)

More recently, Clawson (1964, p. 1) examined the future impacts and trends of leisure, defining leisure as "all time beyond the existence and

subsistence time." In order to exist, man must sleep, ingest food, and have some time for personal hygiene. To subsist, man must work at a job or jobs in order to obtain income, in most cases. This definition places leisure time as discretionary time, employing an element of "choice," and primarily an opportunity of self-expression.

He saw trends for the future of leisure involving the total numbers of people in the nation, their age, and their position in the life cycle. Impacts were assumed to depend on the length of the average work week, the size and timing of the pieces of leisure, such as increased leisure on an annual basis. Clawson (1964) concluded that in the future, the limitations of the time factor may have a greater bearing than the amount of income individuals have for leisure.

A somewhat contrasting view was expressed by Riesman (1958) who felt that the onrush of leisure for many people was a form of technological unemployment. This was due, he felt from a societal creation of new wants which move faster than an individual's ability to order and assimilate these wants. Riesman suggested that individuals can take only so much leisure, somewhat to the same extent that there are limits to so much work.

This observation was followed up by Weiss and Riesman (1961) who observed that technological and organizational development has brought leisure within the reach of most individuals, but that these individuals have different rhythms or personal reasons for work and non-work which they

should learn early in life and to which they should seek to adapt their careers.

The need for differing emphasis in leisure research, or consideration of problems associated with leisure studies has been documented in the literature.

Cheek (1971) reviewed three theoretical orientations of leisure research and summarized these studies into three groupings: (1) studies attempting to describe how certain leisure activities are associated with individual occupations, (2) studies indicating that individuals seek activities in their leisure time which are congruent with other aspects of their lives, and (3) studies proposing that leisure and play are necessary conditions for the physical, mental and social well-being of the individual. Cheek pointed out that all these orientations hold to the view of leisure being that time which remains after work is completed. Cheek preferred to view a "work" and "non-work" comparison, and suggested future research consider the "non-work" component somewhat independent of the "work" component.

A detailed examination of the "non-work" aspect initially identified by Cheek was later made by Cheek and Burch (1976). Their comprehensive review of the social aspects of leisure led them to conclude that an "institution of leisure" exists. This "institution of leisure" is firmly established in American society, according to Cheek and Burch, and should be evaluated with play and recreation. Overall, they concluded that the concept of leisure has definite integrative functions, as earlier identified by Berger (1962).

Somewhat related conclusions were made by Dando and Summers (1971) who noted three problem areas related to leisure study: (1) a failure to clearly isolate the relationship between work and non-work from effects of other confounding variables, (2) widespread failure to distinguish between "meanings" of work and non-work and "forms" of work and non-work, and (3) conditions under which the spillover and compensatory hypotheses take place have not been specified; thus steps should be taken in each of these areas to solve these problems.

Additional shortcomings in leisure research were noted by Hendee (1971). He observed that sociology should fulfill or contribute more than it has to the understanding and solution of leisure problems. Hendee felt that research is needed to identify various individual behavioral relationships as well as more accurate predictive techniques of leisure behavior.

Other considerations of uses of leisure and trends in the industrial societies has been undertaken by Zuzanek (1974), who made an important distinction between work and free time. This distinction consists of the amount of leisure at the disposal of society and the individual, depending on the length of work and the distribution of free time between leisure and other non-work obligations. Thus, he pointed out that not all non-work is automatically leisure. His own observation of leisure studies lead him to the following conclusions: 1. There is a growing value centered on bunched forms of leisure, such as weekends or vacations. 2. Less physically demanding non-work obligations seem to be the norm, possibly allowing for increased leisure.

3. The distinction between work and leisure is not as simple as often assumed, but composed of several factors. 4. A socio-cultural base is necessary to fully comprehend the structure of activities and attached meanings. 5. Consideration of changing value orientations, governmental, social and financial policies and changing socio-occupational structures are necessary to avoid the unilinear determinisms of some economic leisure studies.

He also examined two areas which he felt were fundamental problems related to leisure research, the distribution of non-working time between maintenance time and leisure, and the relationship between income and leisure. His general observations were that attempts to study the problem of leisure and various future trends cannot be reduced to quantitative analyses, but he felt that leisure is composed of an economically and culturally patterned "leisure or life style." Thus, a number of factors should be examined, such as the amount of leisure, its structure and the access to and use of recreational, cultural and consumptional facilities.

Leisure research has also been directed toward attitudinal and social psychological variables by such authors as Neulinger and Breit (1969), Shafer (1976), Spreitzer and Snyder (1974) and Martin (1975). Their basic efforts have been to assess, consider, evaluate and explain the subjective human element of the various preceptions of leisure and related uses. This overall effort has identified that even though leisure and recreation activities take place in physical settings, it is not so much the nature of the physical elements

that are important, but rather the quality of the experiences that individuals perceive when using leisure time in some form of recreation.

For example, Neulinger and Breit (1969) examined the attitudinal component of leisure and recommended that existing attitudinal measures of leisure also take into account what individuals might want to do with leisure time and how they like what they are doing. They also noted that the considerations of what leisure means to different people, and the time and money spent as well as the accompanying satisfaction, should be taken into account in any leisure research efforts.

One attempt to assess such considerations of what leisure means to different people was made by Burdge (1961a). He devised an eleven item leisure orientation scale, designed to measure an individual's work or leisure preference/orientation. His initial study concluded that farmers, as a group, were less leisure oriented than non-farmers. A more thorough discussion of Burdge's scale will be considered in detail in Chapter III

Summary of Leisure Studies

The preceding review of literature has shown the vagueness and abstractness often associated with the concept of leisure in the past. While various historical trends and analyses have been reviewed, specific quantifiable or measurable aspects of leisure have been both few and difficult. Thus, several authors reviewed have noted weaknesses in past research, as well as emphases needed in future research.

This current research effort has attempted to use certain suggestions given in the literature. Various researchers point to the necessity of more specific assessments of the concept of leisure. This has been done in part by use of the Burdge scale. This assessment made up only one phase of this current research however. The bulk of the study examined not just the respondents' leisure orientations, but also water-based outdoor recreation activities. The orientations (values) and activities (behavior) were then related to specific occupations. The review of recreation will be given next, followed by detailed considerations of occupational research.

Recreation

This section deals with the concept of recreation, and is more specifically related to how individuals use part of their leisure time. The previous section on leisure was concerned with general orientations concerning what leisure has been historically and areas of needed research. This section is therefore necessary to review what is done with a portion of the leisure time, recreation.

A comprehensive review of the socio-economic consideration of recreation has been given by Clawson and Knetsch (1966). This review made the needed distinction between leisure and recreation:

Leisure and recreation are highly correlated, but they are not the same. Leisure is time of a special kind; recreation is activity (or inactivity) of special kinds. Recreation takes place during leisure; but not all leisure is given over to recreation. (p. 12)

Of particular interest was the explanation of outdoor recreation as only a portion of total leisure time. Total leisure time depends on a number of factors, such as life expectancy, labor force participation, length of a typical work week, reliance of part-time and second jobs, and vacation time. Recreation then is a portion of this total leisure block.

Because of these societal work constraints, leisure time and recreation itself, occur mainly 3-6 hours daily, on weekends, on annual vacations and finally upon retirement, according to Clawson and Knetsch (1966).

Their overall views on recreation can be summarized in the following manner. The individual has a choice in uses of leisure and consequently can also choose recreation activity. Most individuals can choose recreation activity within the range of various opportunities both physically and economically available to them, with these choices somewhat conditioned by the social environment and knowledge of opportunities. Those with low incomes find activities that require substantial outlays of cash practically unavailable to them. In addition, Clawson and Knetsch noted, recreation choices are heavily influenced by both age and sex, with youth having different interests in recreation than the elderly. Certain physical demands and stresses of recreation activity engaged by the young may be more than the elderly can or may want to undertake.

An overview of the purpose of recreation for Americans were given by Danford (1953) who traced the importance of values in recreation, examining the implications and influences of values specifically in recreation planning.

After considering the fundamentals of value formations, he noted that the system of recreation values should take into consideration both the nature of the individual, the needs of human beings in a modern industrial civilization, and democratic principles. He inferred that values in recreation in America have their origin in the nature and meaning of democracy.

He went on to identify certain human needs that are related to and founded in the American value system, with the emphasis being that recreation helps to fulfill these needs. The first need was for individual fulfillment, and secondly the need for activity. He also noted that the needs of recognition, status, self-direction, need for group acceptance and new and interesting experiences were essential.

Similar to Berger's (1962) views on the place of leisure in society, Danford (1953) found recreation fulfilling a societal need:

Recreation is not by any means an antidote for all the ills of a mechanized civilization. Nevertheless, many of the satisfactions which give meaning, and richness, and significance to life, unfortunately for most of us, are not to be found in our work. (p. 109)

Danford (1953, p. 120) went on to define recreation ". . . as a field of activities, freely chosen, possessing potentialities for the enrichment of life through the satisfaction of certain basic individual needs and the development of democratic human relations."

Danford (1953, p. 96) maintained that it is in the leisure of people which provides the opportunity for man to "re-create himself, to escape, at

least temporarily, from the suffocating weight of things and responsibilities" to satisfy certain fundamental needs.

Green (1964) also formulated similar conclusions concerning man's basic needs to recreate, but noted historically that the American perspective toward nature has been somewhat of a "consumers" approach, that of having to "use" nature through recreation to fulfill both humanistic needs and cultural influences. He foresaw and predicted trends toward an increasing demand for recreation, noting "Between 1900 and the year 2000, population should double in size, 'demand for recreation' should triple . . ." (p. 34). With this population increase and probable urban growth, Green foresaw changes in both recreation activity as well as the outlook of Americans with respect to recreation.

A related study of leisure and recreation was made by Seesoms and Oakly (1969), who assessed the emphasis and growth of both leisure and recreation interests. They noted some 50 billion dollars is spent annually on recreation and leisure pursuits, second to the pursuit of security and national defense. They also concluded that recreation choices are conditioned by life style concepts as well as being a product of past experiences.

In all probability, one of the most indepth and comprehensive assessments of outdoor recreation was undertaken by the Outdoor Recreation Resource Review Commission (1962) which was a coordinated study of American outdoor recreation resources, including various current measures and demands for 1976 and the year 2000. Also included were recommendations

for needed actions to help insure quality recreation in America. The final research effort resulted in an overall summary report entitled Outdoor Recreation for America plus some 27 ORRRC Study Reports, covering most aspects, trends, problems and surveys of recreation in America.

The 1962 summary report Outdoor Recreation for America had three principle objectives (1962, p. 2):

1. To determine the outdoor recreation wants and needs of the American people now and what they will be in the years 1976 and 2000.
2. To determine the recreation resources of the Nation available to satisfy those needs now and in the years 1976 and 2000.
3. To determine what policies and programs should be recommend to ensure that the needs of the present and the future are adequately and efficiently met.

The general findings of the various studies connected with the overall research effort were (1962, pp. 3-5):

- 1) The simple activities are the most popular.
- 2) Outdoor opportunities are most urgently needed near metropolitan areas.
- 3) Across the country, considerable land is now available for outdoor recreation, but it does not effectively meet the need.
- 4) Money is needed.
- 5) Outdoor recreation is often compatible with other resource uses.
- 6) Water is a focal point of outdoor recreation.
- 7) Outdoor recreation brings about economic benefits.

- 8) Outdoor recreation is a major leisure time activity and it is growing in importance.
- 9) More needs to be known about the values of outdoor recreation.

The study noted there was an increasing demand for outdoor recreation which accompanied a growing population base. This was coupled with more leisure time available for recreation. In addition, coupled with a demand for outdoor recreation was a demand for greater variety. This variety, the report noted, reflects the values which many Americans seek from outdoor recreation. These values include sociability, solitude, serenity of the forest, as well as the excitement of physical activity of the water.

Summary of Recreation Behavior

The preceding section has been to this point a partial overview and review of the concept of recreation. The more detailed review of studies and research related to specific occupations and outdoor recreation will follow this section. It seemed reasonable to provide a basic review showing the distinction between leisure and recreation. The former was found to be a time of a special kind, while the latter was found to be a specific activity which takes place during leisure. In addition, the national trend seemed to project an increasing importance of and demand for water related outdoor recreation activities.

With this basic background and distinction made, the review of literature shifts to the core concern of this study. That is, the relationship

between specific occupations, leisure orientations and pursuits of water-based outdoor recreation.

Occupation and Related Influences

Current research efforts which have considered the predictors and influences for preferences toward outdoor recreation pursuits have extensively examined the characteristics of education, age and income. Less conclusive efforts have been attempted with respect to occupation and recreation.

It is not the intent of this study to replicate studies concerned with the characteristics of education, age and income, but they will be briefly stated because of their correlation with an individual's occupation. Following the brief considerations of these areas, a more indepth examination will be made of the relationship between work and occupations as these relate to leisure and recreation pursuits.

Education

The importance of education as it is related to outdoor recreation participation rates has been the object of many studies. The findings of the majority indicate that outdoor recreation participants generally have more education than non-participants (ORRRC Report 1962, Owens 1970, Burdge 1973, White 1975, and Zelman 1976), and that generally, participation increases as education increases. Although the interrelationships of occupation, income and education are difficult to sort out, education is seen

somewhat as an intervening influence, often making participants more aware of recreation opportunities, as well as providing contacts with individuals who are themselves active participants. "Education tends to broaden one's perspective and the income from better paying jobs allows opportunity to explore a variety of leisure pursuits." (Burdge 1969, p. 73)

One study which examined the relationships of education to recreation was that conducted by Richardson and Peery (1966). They examined education and participation in outdoor recreation in Utah, finding that people having less than 12 years of schooling showed less proportionate participation in various recreation activities except camping, while people with college degrees showed higher than proportionate rates of participation in all recreation activities except fishing and hunting.

Lindsay and Ogle's (1972) study of socio-economic patterns of outdoor recreation at Pineview Reservoir, one of the reservoirs included in this study, found differences in the education and participation rates of users and non-users, but interestingly enough, users at Pineview had less rather than more education than non-users. This finding was attributed to the easy access to the reservoir by any educational level. Therefore, the element of distance to a reservoir might also be a contingency when overall activity is considered.

Age

The several studies examining SES factors and outdoor recreation participation rates note that age is an important determinant and predictor of participation (White 1975, Lindsay and Ogle 1975, Burdge 1973, ORRRC Reports 1962, Owens 1970).

The importance of age on outdoor recreation participation is clearly stated by Richardson and Peery (1966, p. 23):

If you really want to enjoy recreation, do not delay. Do it while you are young. This is the message that this survey reveals when an analysis is made of participation and age. It is foolish to expect that you can work hard when you are young, save your money, retire then enjoy outdoor recreation. By the time you reach 65 energy has become so depleted that the average person has almost stopped all strenuous outdoor recreation activity.

Income

Studies by Hendee (1969), ORRRC Report (1962), and Owens (1970), concluded that income is a major determining factor of outdoor recreation participation rates, and that generally those in higher paying occupations and those with higher income participate more. White (1975) concluded that both education and income were major determinants of participation, but income seemed to be the deciding factor in terms of recreation pursuits.

Richardson and Peery (1966) noted that Utah residents with low income levels had less participation in outdoor recreation than those with higher

incomes, and that the middle income group participated more actively than the low or high income groups.

However, it appears that distance is also a contingent factor, when considering income. Lindsay and Ogle's (1972) study of the socio-economic patterns of outdoor recreation users of Pineview Reservoir in Weber County found no significant difference in income levels between users and non-users. They concluded however, that the lack of difference was due to the easy access to Pineview Reservoir by all income levels, as the reservoir is located only 10 miles from downtown Ogden, Utah.

Occupation

The main interest of this study was to examine three major areas. The first two general areas were leisure and recreation which were previously reviewed. The third area concerned occupation as it related to the other two areas.

This section of the literature review then attempted to bring these three areas together. General implications and theoretical works related to occupation in general were reviewed. This was followed by more specific research concerning specific occupations as they related to leisure and outdoor recreation activities.

One basis for occupational considerations and relationships to leisure time uses stems from comprehensive works and theoretical considerations of Wilensky (1961) and Gerstl (1961).

These works provide a framework for this current research effort. That is, what are the relationships and contributions of work and leisure? Does occupation, with accompanying time obligations and income have discernable relationships to leisure pursuits?

Wilensky (1961, pp. 33-37) reviewed historical trends in the amount of time spent in work, and identified that the process of work over several centuries to indicate that the time at work increased for some years before it decreased, and more recent increases in leisure time has not been equally distributed among occupational groups. In addition, even though men now enter the work force at a young age, and retire at an older age than in the past, Wilensky felt that they work more years over their life cycle than they did in 1900.

Wilensky's view was that the various gains of increases in leisure time due to economic growth have been exaggerated, with the skilled urban worker having received only minimal gains in terms of actual leisure, with those in the upper classes gaining even less. ". . . Even though their work-lives are shorter and vacations longer, these men work many steady hours week after week--sometimes reaching a truly startling total." (Wilensky 1961, p. 55)

The composite group of leisure class today, maintained Wilensky, was not really a class at all, but a collection of occupational groups with accompanying age categories who had 1) motivation and opportunity to choose

leisure over income or 2) who were marginal to the economy and therefore forced into leisure.

The first group was comprised of a growing number of middle class individuals, such as the college educated engineer and those of the upper working class. The second group consisted of those individuals associated with low income and low status jobs. In addition, this group was comprised of a high percentage of individuals who were unemployed and those who were forced into retirement, thus suggesting that these men actually had more leisure time, but possibly wanted more work.

In summary, Wilensky noted that the amount of work continues to dominate the work-leisure continuum. That is, the whole process and nature of working, along with the structure of the job highly contribute to differing choices of leisure time uses. He felt that the nature of some occupations necessitated long hours, while other occupations were held by men and women who actually chose long hours. Thus, the nature of these occupations, in terms of actual leisure, could possibly dictate the time available for recreation pursuits.

It is precisely on this conclusion that this current study will attempt to shed some additional light. That is, to examine differing occupational classifications and time spent in actual outdoor recreation activities and preferred leisure interests.

Gerstl (1961) focused on the occupational milieu itself, which he felt was one of the most crucial variables in considering the relationship of work

and leisure. To him, the overall structure of the work situation seemed to be the overriding factor which provided the framework for other activities, with possible spill-over tendencies or even fusion of work with leisure.

In addition, the nature of occupations was viewed by Gerstl (1961) to be more disciplined, structured and organized than it had been previously. Thus leisure would possibly come in more bunched packages, due possibly to both worker and employer preference and necessity.

He also noted that to contrast or compare a skilled worker's patterns of leisure with those of professional people will not explain the differences or similarities of leisure between the two groups. Rather he wanted to examine the workers' occupational milieu itself. To accomplish this comparison, Gerstl compared occupations at the same prestige level which have differing work situations. He compared three occupations which were related in terms of status and prestige; the dentist, the adman and the professor.

Gerstl (1961) compared 25 individuals from each group, each approximately age 40. He examined the nature of the work performed, the setting of the work situation, and the norms derived from occupational reference groups. He then compared these factors with non-occupational behavior or leisure. He noted that: "The consequences of the structure of the work situation are seen most directly in the extent to which hours of work provide the framework for other activities . . ." (p. 67).

Among Gerstl's findings were the following. The nature of the work of the dentist, adman and professor seemed to dictate whether or not they

could take work from their office home in the evenings or while on vacation. The college professor was able to do so, as well as the adman, but the nature of the dentist's occupation did not allow for such an opportunity.

He found that the long hours required for the professor's occupation necessitated less time for home life and less leisure activities.

On the other hand, the adman's business routine allowed for recreational activity during the day, as an integral part of the job. This was a luxury that the dentist probably did not have. His work dictated it be done in the office.

In addition, the specialization of skills associated with a particular occupation were seen to carry over into leisure areas. The dentist was found to be engaged in hobbies that required the use of his hands, just as his work did. The adman would involve himself with painting and writing, similar to his occupational functions. The professor was found to spend what limited leisure time he had in intellectual pursuits such as reading for pleasure. The adman was also found to use leisure to blow off steam, by golfing for example. The dentist, however, would pursue leisure by relaxing and taking things easy.

Somewhat earlier but related research on work and life-styles was conducted by Dubin (1956) and Orzack (1959).

Dubin's (1956) effort was an attempt to consider to what degree the "work ethic" and work experience per se were of a "central life interest" to industrial workers. He also examined the role and importance of primary

social relations of industrial workers on the job, including an assessment to determine if workers personally identified themselves with the organization for which they worked.

Assessment of these factors was made through questionnaires of 491 workers and from 120 sample interviews of employees of three industrial plants.

Dubin (1956, p. 134) defined the "central life interest" as "the expressed preference for a given locale or situation in carrying out an activity." He found approximately three out of four did not find work as a central life interest. In addition, 9% preferred social relations in the job while 91% preferred the family, the community or friends for primary social relations. However, some 61% did identify with their company as a form of organizational attachment to which they felt personally involved.

Thus Dubin's conclusion that work may not be the central life interest of workers would seem to be reflected in Berger's (1962) comments on leisure, that work has lost its moral content, and individuals possibly turn to leisure and other activities in order to find a more satisfying component of the social structure.

Orzack (1959) attempted a replication of Dubin's work, but looked at the central life interests of professional nurses rather than the industrial workers. He hypothesized that the professional nurse would identify with and value work as a life interest. His comparison seems weakened by the fact that he sampled 150 professional female nurses which was a narrowly defined

sample. However, he did find that 80% of the professional nurses did find work and the work place as a central life interest.

It is at this point that the review of literature will focus on more specific occupational studies, especially as they relate to outdoor recreation activities. In addition, the foregoing research seems somewhat lacking in sufficient studies related specifically to occupation and outdoor recreation, which is an activity involving some use of leisure time. Therefore more and continuing research seems justified to help illuminate this area.

One study related to this emphasis was conducted by Burdge (1969) who reviewed occupational prestige and corresponding leisure activities. He noted that those individuals of high income, younger age category, with high education levels, having positions with paid vacations, have been generally found to be the most active in structured leisure activities.

Burdge employed the North-Hatt Occupational Prestige Scale of four classes:

- I. Professional and high level management
- II. White collar worker
- III. Skilled worker
- IV. Unskilled worker

He found persons in the high occupational prestige levels were the most active in all major types of structured leisure, and individuals in the highest prestige class were found to participate in the greatest variety of leisure activities.

Burdge stressed that the concept of various forms of leisure or free time activity being associated with specific social classes needs to be re-examined. Those in middle to upper class positions seemed to have adequate income, which has opened up a much wider variety of recreational and leisure opportunities. The accompanying education tended to broaden one's perspective, and better paying jobs provided more income with which the individual could explore more leisure pursuits. Individuals of a lower occupational groupings tended to have more limited income and life experiences, often engaging in less leisure and recreation activities.

White (1975) employed a national stratified sample of 1969 Canadian households. He looked at occupational prestige groups, and examined some 26 outdoor recreational activities. His results showed that individuals in high prestige occupational groupings participated in significantly more activities than lower groups, and they also participated in them more frequently. Thus the nature of a person's occupation is related in a wider range of activities. Education, age and income were also found to be important predictors of outdoor recreation activity.

A study closely associated to the interests of this current research effort was conducted by Owens (1970). He assessed and measured the recreation activities and preferences of 2756 individuals of 52 counties in Ohio, 12 counties in Kentucky and 8 counties in West Virginia. His aim was to determine the relationship between recreation participation and characteristics of the participant.

Outdoor recreation was defined as the use of leisure time outdoors, and included such activities as sightseeing, swimming, picnicking, power boating, canoeing, rowing or sailing, skin diving, scuba diving, ice skating, skiing and "other" activities.

Owens (1970) found generally that urban and rural non-farm people participate more than rural farm people in most activities except hunting, camping and "other." In addition, whites participated more than non-whites in all activities except sightseeing, fishing and "other."

Reflection upon the context within which recreation takes place, adds to the acceptability of the foregoing analysis. Rural farm people are generally exposed to the outdoor more than their city cousins. Although they may value outdoor experiences quite highly, they probably commune with nature enough while working and do not feel as much need to seek further outdoor experiences during their leisure time. Farm people also tend to subscribe to the work ethic more than urban people. The work ethic is an attitude which disparages "unconstructive" use of leisure time. (p. 6)

In general, the most popular outdoor activities were found to be those of picnicking, sightseeing, swimming and fishing.

Upon examining various socio-economic characteristics, the following conclusions were drawn by Owens (1970, p. 6): The rural farm respondents' areas were not found to be proportionately re-presented in any of the activities except hunting. Also, the rural non-farm respondents were least represented in picnicking, power boating, camping and snow skiing.

However, the urban respondents were well represented in golf, skin diving, rowing, sailing, power boating and picnicking. They were least represented in hunting and fishing.

On the average, participation rates were generally higher for urban respondents than for those from the rural area, with the rural farm respondents having lower participation rates generally than the rural nonfarm.

Owens found that the interrelationships of education, income and occupations were difficult to separate. However, those with the highest educational levels participated most often in golf, snow skiing, ice skating and water skiing. Those with the lowest educational levels participated most often in fishing, hunting, picnicking and camping.

A related finding was that those participants with lower education levels participated in activities involving lower costs and were less strenuous in nature. Those with more education participated generally in higher cost activities which were also relatively physically demanding.

The occupational breakdown which was used was made according to the Census of Population breakdown. It was found that the sales occupational group seemed to have the highest relative percentage of participants in all recreation activities, as well as having high participation rates.

The professionals had a high proportion of participants in all activities also, except fishing, hunting and picnicking. However, the professionals had fairly low participation rates. Owens felt this could be attributed to limited leisure time, even though the orientation may be high.

The service and clerical workers on the other hand had very high participation rates, possibly attributed, Owens felt, to an abundance of leisure time.

A related research effort conducted in Utah found somewhat different findings than Owens. Richardson and Peery (1966) conducted a comprehensive study of outdoor recreation demands of Utah residents, attempting to establish a profile of demand characteristics. Specifically, income, social characteristics and demographic factors were considered.

With respect to specific occupations and participation in outdoor recreation, they found professional, technical and managerial occupation groups showed higher than average participation rates in such activities as skiing and golfing, while skilled craftsmen had about average participation rates in all activities.

Operators (semi-skilled) showed less than average participation in most activities, but considerably more than average participation in hunting. Unskilled labor occupational groups had less than average participation in all activities.

Richardson and Peery speculated that possibly the high income of professional, technical and managerial groups might help account for higher participation rates. This may also have been influenced, Richardson and Peery felt, due to possible social expectations in these occupations that they "should" be actively involved in recreation since they were respected occupational groups.

With respect to occupational breakdown, the previous research efforts reviewed had somewhat differing findings. For example, distinct differences were found between the professional groups in Owens (1970) study

and Richardson and Peery (1966) study. Therefore, this current research effort will examine this area to see if additional clarification and understanding can be made.

Because the current research effort also considers farm and nonfarm respondents, studies relating to rural and urban differences with recreation were reviewed.

The literature concerning effects of rural and urban recreation differences has shown that rural farmers may have different leisure/recreation preferences than urban residents due to the nature of their work. Burdge (1961a, p. 23) noted "Since farming as a way of life places an emphasis on work, the hypothesis that farm people are less leisure oriented than urban people is not unrealistic." Burdge went on to conclude that his study revealed farmers having a statistically lower overall leisure orientation scores than the urban sample.

Hendee (1969) also studied rural-urban differences in outdoor recreation participation and found that the difference between rural and urban recreation is not conclusive. He felt that theories of the urban-rural participation difference should be built around the various socio-economic factors rather than just on residence alone.

Harry (1971) on the other hand, examined some implications of the work/leisure continuum and considered the rural/urban distinction. He hypothesized that individuals who have occupations such as farming or mining for example, which somewhat require direct exploitation of natural resources,

will have a more exploitative attitude toward nature than those who have non-exploitative occupations. In addition, individuals who have a exploitative occupation will not be as likely to look on outdoor recreation situations as being an appropriate expression of social and aesthetic values as those whose occupations do not exploit nature.

Using data from 2,412 summer recreation visitors to three national forests and two national parks in the State of Washington, Harry (1971) found those with exploitative occupations to have somewhat of a more exploitative attitude toward nature. He found less support that those exploitative occupations would not be as likely to look on outdoor recreation as an appropriate expression of social and aesthetic values. He concluded that "there is some direct transfer of occupational culture to the leisure situation" (Harry 1971, p. 308).

Of central interest to this study is Andrews, Madsen and Dunaway's (1973) research on leisure and environmental orientations of farmers, part-time farmers and non-farmers.

The research considered a continuum of farmers (N of 88) part-time farmers (N of 71) and non-farmers (N of 145) for a total of 304 respondents selected from two eastern and two central counties in Utah. Of particular interest was the part-time farmer who is considered to possess characteristics of both farmers and non-farmers. The part-time farmer was defined as one who earned less than half his income from farming, but earned \$250 or more from farming.

One consideration as noted in the research was to compare the continuum of farmers, part-time farmers and non-farmers with each other to provide the opportunity to study the possible influences of occupational roles with particular leisure orientations.

The individual's leisure orientation was assessed by a modification of a leisure orientation scale developed by Burdge (1961a), which consisted of a six-item scale to measure an individual's orientation or value toward leisure.

The authors found that the non-farmer had the highest average leisure orientation score, indicating the greatest overall orientation toward leisure, with the part-time farmer having the next highest average, and farmers having the lowest orientation toward leisure.

When age was controlled, the pattern still held, with the farm sample still holding a lower overall leisure orientation than the non-farmers.

Of particular interest was the finding that when comparing the farmers and part-time farmers who were age 49 and younger, both occupational groups scored almost identically, indicating possible similar orientations possibly because of the farm occupational influence, be it full or part-time.

In addition, when age and leisure orientation scores were compared, respondents less than 49 years of age or younger tended to be more leisure oriented than the older respondents. This must indicate that younger

respondents have become more oriented toward leisure than the older generation, or as individuals become older, they become less leisure oriented.

Andrews, Madsen and Dunaway's (1973) research effort concluded that a more specific occupational breakdown should be made. The current research effort attempted such a breakdown following their recommendation.

Summary of Occupational Literature

Specific research findings reviewed with respect to occupations, leisure orientation and recreation participation have not been totally uniform. That is, differing findings and conclusions have surfaced with respect to comparisons of occupational categories. For example, professionals in Owens (1970) study were low in recreation participation. Richardson and Peery (1966) on the other hand found professionals to have high participation in recreation activities. Thus it would seem that this area of research warrants further consideration.

In addition, a replication of the leisure orientation of the farmer and nonfarmer would also prove useful. The research has shown that generally those occupational groups which also participate in part-time farm activities tend to share the values of the farmer toward work and leisure. That is, work seems to be preferred over leisure. When outdoor recreation is pursued, both less variety and lower rates of participation occur.

On the other hand, the nonfarm group tend to have a lower value toward work, higher leisure orientation, and seem to participate more

actively in outdoor recreation. Additional research in this area would also prove useful to more fully understand these distinctions.

Statement of Hypotheses

Therefore, the current research effort will examine several areas that have been noted in the literature that need consideration. These include specific occupational breakdowns and related recreation comparisons.

The following hypotheses will therefore be examined:

- 1) The nonfarm respondents will have higher leisure orientations than the farm respondents.
- 2) Nonfarm Professionals will have high participation rates in outdoor recreation activities.
- 3) Nonfarm Managers will have high participation rates in outdoor recreation activities.
- 4) Nonfarm Laborers will have low participation rates in outdoor recreation activities.

In addition to examination of the above hypotheses, additional areas will be considered. This is because of the lack of prior research and/or for the need to clarify previous issues. The following areas will also be examined:

1. Analysis will be made with respect to the leisure orientations of both farm and nonfarm respondents, but will also consider the specific occupational breakdown of Professional, Manager and Laborer respondents, and their leisure orientations.

2. Similarities and differences will be examined with respect to participation rates in various outdoor recreation activities and the enjoyment level of such activities. Again, this comparison will consider the Professional, Manager and Laborer respondents with participation rates and levels of enjoyment.

Definition of Terms

For purposes of this study, the following definitions will be used.

Work

Defined as the activity for which rewards (usually monetary) are obtained.

Leisure

Defined as the time an individual perceives himself to be free from the obvious and formal duties a paid job or other obligatory occupation imposes.

Leisure Orientation

Defined as the value an individual holds toward leisure relative to work.

Outdoor Recreation

Defined as the sum total of all outdoor activities of a pleasurable nature which are carried on for immediate satisfaction.

Water-based outdoor recreation participation

Defined as a specific outdoor recreation activity rate which takes place at or adjacent to reservoirs, such as swimming, boating, picnicking, sightseeing, etc.

CHAPTER III

METHODOLOGY

Leisure Orientation Scale

The leisure orientation scale used in this study was a modification of the original leisure orientation scale first developed by Burdge (1961b) but modified by Andrews, Madsen and Dunaway (1973).

The original scale designed by Burdge (1961b) consisted of 103 items related to leisure. Following elimination of redundant and irrelevant items, some 69 remaining items were administered to a sample of individual's judged to have high and low leisure preferences. This procedure was followed by a scale analysis reducing the item number to 20 which was then administered to 66 farmers. The results were then analyzed to reduce the scale to a final 11-item leisure orientation scale (Burdge 1961b).

Burdge noted that the Gurman Method for determining unidimensionality was used, and a 90.2% reproducibility figure was obtained. In addition, item-to-total score correlations were used to measure internal consistency, substantiating the high interrelationship of the scale items.

Burdge (1961b) tested the 11-item scale for reliability by randomly selecting two sub-scales which correlated +.64 with each other. The interviewer's ratings as to the respondent's degree of leisure orientation correlated at +.58 with the 11-item scale. At that time, Burdge determined that

the 11-item scale achieved acceptable levels of unidimensionality, internal consistency and reliability, with some evidence of validity. Table 1 is the final 11-item scale originally developed by Burdge (1961b, p. 6).

The overall purpose of the scale was to determine a respondent's values toward work and leisure. That is, the respondent's score would place him somewhere in the work oriented or leisure oriented continuum. Thus an individual having a low score on the leisure orientation scale would adhere more closely to the values as understood to be a part of the Protestant ethic. A respondent having a higher score would identify himself more closely with the values associated with a favorable attitude toward leisure.

Andrews, Madsen and Dunaway (1973) made minor modifications of the scale which was then used in their research efforts. They noted that one of Burdge's attempts to assess the validity of the scale involved a comparison of leisure orientation to an urban versus farm dichotomy, hypothesizing that it was not unreasonable to assume that since farming per se places an emphasis on the work ethic, farm individuals would be less leisure oriented than urban individuals. Burdge's (1961a) original research found support for this hypothesis.

Yeosting, Warren and Burkhead (1971) used Burdge's scale to determine the leisure orientation of rural and urban individuals but had inconclusive data with respect to the leisure orientations between the two groups.

TABLE 1
ITEM-TO-TOTAL SCORE CORRELATIONS FOR THE 11-ITEM
LEISURE-ORIENTATION SCALE

Scale Item	Correlation with Total Score**
1. *The constructive use of leisure time is the answer to many of the problems now facing the American society. (+)	+.83
2. The only way I can justify my leisure time is to work for it. (-)	+.60
3. *I generally feel guilty when I enjoy leisure for more than a short time. (-)	+.67
4. *Leisure serves no useful purpose in my life. (-)	+.82
5. My leisure activities are just as important to me as work activities. (+)	+.57
6. I would like a shorter work week in order to have more free time for other things. (+)	+.50
7. The only satisfaction I get out of life is working. (-)	+.57
8. Most people know how to spend their free time wisely. (+)	+.40
9. *My chief reason for working is to pay for my leisure activities. (+)	+.75
10. *I feel guilty when I'm on vacation, because I'm not working. (-)	+.70
11. *Most people spend too much time enjoying themselves today. (-)	+.65

*If a researcher desires a short form of the percent scale, the six starred items correlate +.94 with responses for the 11-item scale.

**All 11 correlations are significant at the 1% level. Points were awarded on a 5-point basis (0-4), signs at the end of each scale item indicate direction.

Andrews, Madsen and Dunaway (1973) employed a modification of the Burdge Leisure Orientation Scale to assess the leisure orientations of farmers, part-time farmers and nonfarmers.

The scores for each respondent, as in the original scale, could range from 1 to 5 for each of six questions, giving a total possible range of 6 through 30. As noted previously, a score of 6 indicated a greater work orientation, while a score of 30 indicated a greater leisure orientation. The respondents were asked if they strongly agree, agree, were undecided, disagree or strongly disagree with each statement of the scale.

The following is the six item modification of the Burdge Scale and its respective item-to-total correlation scores which are indicated by r values (Andrews, Madsen and Dunaway 1973, p. 5).

1. I generally feel guilty when I enjoy leisure for more than a short time. $r = .65$ (Exact statement as developed by Burdge.)
2. Frankly speaking, much of the time work is pretty dull, but leisure makes life worthwhile. $r = .45$ (This statement was developed by Andrews, Madsen and Dunaway 1973.)
3. Today most people spend too much time just enjoying themselves. $r = .61$ (This statement was taken from the Burdge Scale, but the word "Today" was added.)
4. I sometimes feel guilty when I'm on vacation because I'm not working. $r = .58$ (This statement was taken from the Burdge Scale, but the word "sometimes" was added.)

5. I generally get more enjoyment out of leisure activities than I do out of work activities. $r = .58$ (This statement was developed by Andrews, Madsen and Dunaway 1973.)
6. Generally speaking the main satisfaction I get out of life is working. $r = .59$ (This statement was taken from the original scale, but the words "generally speaking" were added and the word "main" was substituted for the original word "only.")

Thus Andrews, Madsen and Dunaway (1973) had modified Burdge's (1961a) short form of the scale by making minor word changes, as well as adding two statements which seemed to give the scale more cohesion and simplification.

In general, Andrews, Madsen and Dunaway (1973, p. 6) found non-farmers to have the highest average scores (18.28), indicating the greatest overall orientation toward leisure, the part-time farmers the next highest average score (16.46) and the farmers the lowest average scores (15.27). The differences between these groups were found to be statistically significant.

In the current research effort, the six item modification of the Burdge scale was used, assessing the leisure orientation of the nonfarmer, part-time farmer and full-time farmer, as well as by specific occupation.

Water-Based Outdoor Recreation Participation

The specific measures for determining a respondent's recreation participation were assessed by asking them questions relating to time spent in recreation activities in general and actual time spent in water-based outdoor recreation at various reservoirs of the Weber Basin Project.

Respondents were questioned concerning their participation in the following activities (see Appendix):

I. Sports (baseball etc.)

Water Activity (fishing, swimming, etc.)

Equipment Sports (snowmobiling, motorbike riding, etc.)

Travel (by automobile, sightseeing, etc.)

Yard Activity (recreation at home)

II. Fishing at a lake or reservoir

Swimming at a lake or reservoir

Water fowl hunting at a lake or reservoir

Boating and/or canoeing at a lake or reservoir

Water skiing at a lake or reservoir

Picnicking at a lake or reservoir

Camping at a lake or reservoir

Sightseeing at a lake or reservoir

Respondents were queried directly concerning activities in item I, and in item II were given a card (see Appendix) with the above mentioned

activities listed and asked:

"This past 12 months which of the following responses best describes how often you have participated in this water-based activity?" (fishing, swimming, etc.)

The following response breakdown was used:

1. I have been going on a regular basis, i.e., about once a week or more during the season.
2. I have gone several times during the season, i.e., four, five or six times.
3. I have gone only a few times, i.e., two or three times during the season.
4. I have seldom gone, i.e., one time, during the season.
5. I have not participated in this activity this past year (past 12 months).
6. I have not participated in this activity since 1961.

It is important to note at this point that analysis of these questions as stated had certain limitations. The response categories are not interval measures, but of an ordinal nature. However, for purposes of analysis, these responses are to be tested as if they were interval measures. That is, statistical analysis is to be made on the 1-5 response range, employing various statistical measures, such as means, standard deviations and tests of significance. The mean response of say 3 for example does provide a rather adequate index of the respondent's actual participation, two or three times during the year. A mean response close to 5 would indicate very little

to no participation, and a mean response close to 1 would indicate fairly active participation in the respective recreation activities.

However, because these measures are not in actuality interval categories, the level or measures of significance will not be as robust as would be measures on actual interval responses. Therefore, the significance tests will be somewhat limited in terms of overall generalization concerning the responses for the various occupational breakdowns used.

After the respondents answered the question of participation for each activity, he was also asked:

"On a five point scale with 1 showing the least enjoyment and 5 the most, how would you rate this activity?"

Thus not only was his actual participation rated for each activity (fishing, swimming, hunting, etc.) but the respondent also specified his enjoyment per se in the activity.

After each activity was assessed concerning participation for the past 12 months, as well as level of enjoyment, the respondent was asked to rate overall which specific activity he participated in most during the year. This was assessed with the following question:

"Which of the water related activities that we have been discussing (i.e., fishing, swimming, water fowl hunting, waterskiing, boating, picnicking, or camping at a lake) do you participate in most during a typical year?"

The respondent then identified which specific activity of the eight activities being considered he participated in most.

These measures thus provided adequate data on eight specific outdoor recreation activities considered and rated by the nonfarm, farm and part-time farm respondents.

With the ratings provided by the leisure orientation scale, the above mentioned ratings of recreation activity, and actual water-based outdoor recreation participation (with accompanying enjoyment), analyses were performed relating these three major areas of interest and assessment with occupation.

Occupational Breakdown

In addition to the assessment of leisure orientations and outdoor recreation participation, an additional objective was to determine as much as possible, the difference between various occupations with respect to leisure orientation and participation in various outdoor recreation activities.

One segment of the interview schedule was designed to assess an occupational breakdown as used by the U.S. Bureau of Census. Specifically, the breakdown that was examined in this current study included the following for the nonfarm sample:

1. Professional, technical and kindred workers (Professional)
2. Managers, officials and proprietors (Managers)
3. Craftsmen, foremen and laborers (Laborers)

Due to the extremely small sampling of the occupational classifications, the Laborer category was also comprised of craftsmen and foremen.

It is important to note the distinction and uniqueness of the breakdown for the farm sample. As noted previously in this study, the farm sample is composed of full-time farmers (farm managers, farmers and farm laborers in this case) as well as part-time farmers, who also hold another full-time occupation.

Therefore, in this study the following breakdown was used for the farm sample:

1. Professional, technical and kindred workers (Professional)
2. Managers, officials and proprietors, including farm managers
(Managers)
3. Craftsmen, foremen and laborers, including farm laborers
(Laborers)

Thus all respondents of the farm sample did in fact farm, but the majority were part-time farmers, who also had other full-time occupations. In order to be included in the sample frame as a farmer, by definition an individual needed to earn only \$250 annually from farming.

For example, a person coded "Professional" in the farm sample meant he was a professional but also a part-time farmer. The true farmer and farm manager were coded in the Manager category and the farm laborer was coded in the Laborer category.

Due to the extremely small sampling of the occupational classifications, the Professional, Manager and Laborer groupings were analyzed. The other occupational classifications of clerical, sales, private household

workers, military and miscellaneous were extremely small in number and were not included in the analysis. However, they were included when total comparisons were made of the nonfarm and farm samples.

Study Hypotheses

Four specific hypotheses were examined in this research effort, along with additional considerations and elaboration of the data.

The first hypothesis to be tested, as stated in Chapter II, was "The nonfarm respondents will have higher leisure orientations than the farm respondents."

Operationally, the respondents were given the modified Burdge Leisure Orientation Scale, which was described in detail earlier in this chapter. The respondents would score a point value ranging from 6 to 30. Again, a 6 rating would indicate a greater work orientation, while a 30 response would indicate more leisure orientation. Therefore, mean scores were computed for the entire scale. For the first hypothesis to be supported, the mean score for the nonfarm respondents should be higher than the mean response for the farm sample.

The second hypothesis to be tested that "Nonfarm Professionals will have high participation rates in outdoor recreation activities."

Operationally, this hypothesis was tested by computation of the responses to the questions on participation of various outdoor recreation activities. The responses ranged from 1 to 5. A score of 1 was an index of

regular participation and a score of 5 was an index of no participation. Mean scores were computed for these response categories. In order for the hypothesis to be supported, the mean response should be below 3 in four (4) or more of the eight activity categories.

The testing of hypotheses were limited to the nonfarm sample for two reasons. One was that the nonfarm sample seemed to be most similar to the Richardson and Peery (1966) study of Utah residents. Secondly, the farm sample included respondents who also engage in part-time farming, which does not compare to previous studies. While analysis was made of this group, the hypotheses testing were limited to the nonfarm group.

The third hypothesis to be tested stated that "Nonfarm Managers will have high participation rates in outdoor recreation activities."

Operationally, testing of this hypothesis was similar to the Professional group previously mentioned. That is, mean scores were computed for the response index of the 1 to 5 activity levels. In order for the hypothesis to be supported, the mean response should be below 3 in four or more of the eight activities.

Similar analysis was made of the fourth hypothesis. It stated "Nonfarm Laborers will have low participation rates in outdoor recreation activities."

Operationally, the mean responses to the 1 to 5 index of activity was made. In order for this hypothesis to be supported, the mean score should be 3 or greater in four or more of the eight activities.

In terms of analysis and comparisons, various groups and subgroups were examined. The first two main comparisons consisted of the total non-farm and farm respondents. Operationally, this was a general comparison between the two samples, for which mean scores, standard deviation, etc., were made for the leisure orientation scores and activity levels.

The second level of subgroup comparisons was made using the combined responses of the Professional, Manager and Laborer respondents, for both the nonfarm and farm samples. Operationally this subgroup consisted of those respondents who were Professional or Manager by nature of their occupational response. The Laborer category consisted of Laborers by occupational response, and also Craftsmen and Foreman. The latter two occupations were included with the Laborer respondents because of the small number in each category and because the occupations of Laborer, Craftsmen and Foremen fit better together than with Professional or Manager.

Lastly, the third area of analysis focused on the specific occupations themselves, for both the nonfarm and farm respondents. Operationally, the separate category of Professional and Manager were examined. The Laborer category was also examined, and included the Craftsmen and Foremen respondents, as mentioned previously.

The Sample

This study focused on the leisure orientations and outdoor recreation participation rates of a sample of 250 household heads taken from the 1970

Ogden, Utah Urbanized Area of the U.S. Census for Weber and Davis Counties, including Farmington, Utah in North Davis County, which contain some 42,000 households.

In addition, focus and analysis was also made of data collected on 128 household heads who operated farm land in Weber and Davis Counties. These households were taken from a list of 2000 farm land operators, both full and part-time, which was provided by the Agricultural Stabilization and Conservation Service, U.S.D.A. (Andrews, Madsen and Legaz 1974).

The unit of analysis for this study will be the household head of the households sampled. Survey research methods were the principle methods of investigation used, providing the information regarding both leisure orientations and outdoor recreation rates.

Setting of the Study

The setting of this study is made up of the large geographical area of the Weber Basin Project which was built on the river basin along the western slopes of the Wasatch Mountains of North Central Utah, overlapping the Davis, Weber and Morgan Counties.

The reservoirs which made up the project consists of Willard, Pineview, Causey, East Canyon, Rock Port and Lost Creek. Echo Reservoir was not part of the Weber Basin Project, but was included in the study.

The Weber Basin Project services both the urbanized industrial areas of North Salt Lake City on the south to North Ogden, Utah on the north, as well

as serving several rural communities between the two predominant urban centers. The main urban influence in the Weber Basin Project is concentrated in Ogden, Utah, which is a central industrial-commercial city of some 70,000 residents, including a fringe suburban and rural population of an additional 80,000 (Andrews, Madsen and Legaz 1974).

Data Collection

The interviewing of both the farm, part-time and nonfarm samples was conducted during the months of September and October 1972. The interviewing was conducted by hourly paid professional interviewers who administered the comprehensive 23 page interview schedule to the some 378 households (see Appendix).

The interviews took place in the respondent's homes and generally lasted about 1 1/2 hours. The rate of completion for the nonfarm sample was 86%, and 85% for the farm and part-time farm sample, resulting in an N of 378. The same 29% of unfinished interviews were not completed mainly due to the unavailability of the respondents during the interviewing period (Andrews, Madsen and Legaz 1974).

Thus, the nonfarm sample included a total of 250 respondents, while the farm sample included 128 total respondents.

For purposes of this research, the N of 250 and 128 were used when analysis were conducted on total respondents. When grouped occupations

were examined, which constituted the Professional, Manager and Laborer categories, an N of 152 was used in the nonfarm sample and 91 in the farm sample.

In terms of specific breakdown by occupation, the nonfarm sample included 49 Professionals, 30 Managers and 73 Laborers. The farm breakdown by occupation included 23 Professionals, 34 Managers (including farm managers) and 34 Laborers (including farm laborers).

Data Analysis

The data collected by the interviewing of sampled respondents was coded in this study directly in the interview schedule and later transferred to IBM computer cards. The actual analysis of the data was handled by computer, with SPSS programs (Nie et al. 1975).

The analysis of the data collected in this study was conducted in four steps. After initial preliminary computer runs were made and analyzed to verify correct coding and accuracy of the data, the following statistical procedures were conducted:

1. Mean measures, including standard deviations of general leisure orientations were taken from the leisure orientation scale looking first at scores from the three occupational categories, grouped occupations and all respondents main groupings, for both nonfarm and farm samples.

2. An additional statistical approach of Chi-square analysis was used to examine the occupational breakdown and leisure orientation scores.

The scores of each respondent were collapsed into one of three categories of Low, Medium and High leisure orientation. The scores ranging from 6-19 were collapsed into the Low category, with scores of 20-22 collapsed into the Medium category. The scores ranging from 23-30 were then collapsed into a High category. Chi-square analysis was made on the occupational breakdown in one of the three categories.

3. Mean and percentage measures of general participation in various recreation activities were then made for the nonfarm and farm sample. As noted previously, these measures were ordinal measures treated as if interval, rated on a 1-5 activity scale. A score of 1 indicated most activity, while a score of 5 indicated no activity. These measures did provide an index which was representative of a respondent's overall activity in outdoor recreation activities. Again, this was followed by mean measures involving specific occupations and the outdoor recreation activities, including a respondent's rating the enjoyment of the activity on the 1-5 enjoyment scale. A score of 1 indicated least enjoyment while a score of 5 indicated most enjoyment.

4. F tests were then made using the above measures, comparing the differences between the occupational subgroups of the nonfarm and farm sample in specific activities and enjoyments.

5. Finally, correlation and factor analyses were conducted on the various outdoor recreation participation measures in attempts to determine which combinations of activities were used by the nonfarm and farm respondents.

CHAPTER IV

DATA ANALYSIS AND FINDINGS

The presentation of the data analysis and findings will be divided into three main areas. The first review of findings centers on leisure orientations and participation in selected recreation activities. The second review examines specific water-based outdoor recreation activities and occupations. The third review of findings examines an elaboration of the data by considering correlations and factor analysis of the water-based outdoor recreation activities.

Findings of Leisure Orientations and Selected Recreation Activities

The initial test of the data involved assumptions concerning the respondents' leisure orientations. The first hypothesis to be tested was that "The nonfarm respondents will have higher leisure orientations than the farm respondents." In order for this hypothesis to be supported, the mean leisure orientation score for the nonfarm sample should be higher than the mean score for the farm sample. The results of testing this hypothesis are shown in Table 2.

The nonfarm respondents mean score of 20.6 was found to be higher than the farm mean score of 18.6 which was significant at the .001 level. Therefore, the first hypothesis was supported.

TABLE 2
LEISURE ORIENTATION SCORES BY TOTAL RESPONDENTS,
INCLUDING NONFARM AND FARM SAMPLES

Respondents	Mean Scores	Standard Deviation
Total Respondents		
Nonfarm (250)	20.6	3.3
Farm (128)	18.6	3.4

F = 28.1 significant at the .001 level.

In addition to the general nonfarm and farm leisure orientation elaboration of the data was made concerning specific occupational breakdown by the two samples. The initial phases of analyses centered on grouping the occupational categories of Professionals, Managers and Laborers (which also includes Craftsmen and Foremen as explained in Chapter III). These comparisons were made for the nonfarm and farm samples. The results are shown in Table 3.

Of interest in these findings are the higher mean scores for the grouped occupational respondents who were nonfarm individuals (20.9) and the lower farm scores by the same categories (18.5). Both grouped occupations were not significant at the .05 level.

The next area of interest focused on the specific occupational breakdown of Professional, Manager and Laborer respondents, for both the nonfarm

TABLE 3
LEISURE ORIENTATION SCORES BY GROUPED OCCUPATIONS,
INCLUDING NONFARM AND FARM SAMPLES

Respondents	Mean Scores	Standard Deviation
Grouped Occupations ^a		
Nonfarm* (158)	20.9	3.4
Farm** (99)	18.5	3.4

^aIncludes Professional, Manager and Laborer categories.

*F = 3.4 not significant at the .05 level.

**F = 1.2 not significant at the .05 level.

and farm respondents. The mean leisure orientation scores were calculated, with results shown in Tables 4 and 5.

The comparison of means between nonfarm Professional, Manager and Laborer respondents, was not found to be statistically significant at the .05 level or higher when analyzed with the analysis of variance using an F test of mean difference. In addition, a contrary expectation surfaced, with the Laborers having the highest leisure orientation (21.4) followed by the Professionals with 20.6 and the Managers the lowest with 20.3. This finding will be discussed in detail in Chapter V.

The comparison by occupation of the farm sample as shown in Table 5 resulted in an F score of 4.5 which was significant at the .01 level. That is, there was found to be statistical significant differences between the

TABLE 4
LEISURE ORIENTATION SCORES BY OCCUPATION,
FOR THE NONFARM SAMPLE

Occupation	Mean Scores	Standard Deviation
Professional (N = 51)	20.6	4.0
Manager (N = 30)	20.3	3.5
Laborer (N = 77)	21.4	2.7

F = 2.2 not significant at the .05 level.

TABLE 5
LEISURE ORIENTATION SCORES BY OCCUPATION,
FOR THE FARM SAMPLE

Occupation	Mean Scores	Standard Deviation
Professional (N = 24)	19.1	3.2
Manager (N = 39)	17.1	3.3
Laborer (N = 36)	19.6	3.0

F = 4.5 significant at the .05 level.

means of the farm Professional, Manager and Laborer respondents. In addition, the Laborers again had the highest leisure orientation, with a mean scores of 19.6, followed by the Professionals with 19.1 and the lowest scored by the Managers with a score of 17.1.

An additional statistical approach was used to examine the occupational breakdown and leisure orientation. This was accomplished by using a chi-square analysis, and collapsing the respondents scores into Low, Medium, and High leisure oriented categories. The range of the leisure orientation scale was from 6 to 30. A score of 6 would indicate a person totally work oriented, while a score of 30 would indicate a person to be totally leisure oriented. Therefore the scores ranging from 6 to 19 were collapsed into a Low category, with scores of 20-22 collapsed into a Medium category and scores of 23-30 collapsed into a High category. The results of this analyses are shown in Tables 6 and 7.

TABLE 6
LEISURE ORIENTATION RANKING BY OCCUPATION,
FOR THE NONFARM SAMPLE

Occupation	Low	Medium	High	Total
Professional (N = 51)	38%	29%	33%	100%
Manager (N = 30)	37%	30%	33%	100%
Laborer (N = 77)	29%	34%	37%	100%

$\chi^2 = 1.2$ with 4 Degrees of Freedom not significant at the .05 level.

TABLE 7
LEISURE ORIENTATION RANKING BY OCCUPATION,
FOR THE FARM SAMPLE

Occupation	Low	Medium	High	Total
Professional (N = 24)	54%	33%	13%	100%
Manager (N = 39)	72%	23%	5%	100%
Laborer (N = 36)	36%	53%	11%	100%

$\chi^2 = 10.1$ with 4 Degrees of Freedom significant at the .05 level.

A chi-square (χ^2) of 10.1 was found to be significant at the .05 level for the farm respondents, but a score of 1.2 was not found to be statistically significant for the nonfarm respondents. Similar to the results of mean score comparisons in Tables 4 and 5, the majority of the Laborer category in both samples were also found to be ranked Medium or High, while the other two occupational categories were not. Of particular interest is the Low ranking of Managers at 72% in the farm sample, followed by Professionals at 54%.

Additional elaborations of leisure preferences were then examined in terms of hypothetical situations for the respondents of both samples to consider. The area of interest centered on consideration of the use of 3 hours of additional leisure time and five recreation activity areas, by all respondents, grouped occupations and by the three fold occupational format used

previously. These areas were examined by the nonfarm and farm samples, with the results shown in Tables 8, 9, and 10.

In Table 8, the results of both nonfarm and farm samples show a much higher preference for outdoor recreation activities that were centered on or around a lake or reservoir (swimming, fishing, etc.), with 64% and 52% respectively. The next highest preferred activity for both samples involved travel activities (travel by auto, sightseeing, etc.), with the farm sample showing a higher preference of 20% as opposed to 16% for the nonfarm sample. The farm sample also expressed a higher preference for activities involving sports equipment (snowmobiles, motor bikes, etc.) with some 18% preferences found, with only 4% preference by the nonfarm sample.

The considerations of the same 3 hour leisure preference were next examined by the Professional, Manager and Laborer groups considered together, with the results given in Table 9. Again the nonfarm and farm samples gave expressed preference for water related activities (72% for the nonfarm group and 54% for the farm group). The farm group again expressed high preference for activities requiring sports equipment of 21% while the nonfarm group expressed only 5%. Chi-square significance analysis were made on both grouped occupations and found to be significant at the .001 level for the nonfarm sample and at the .01 level for the farm sample.

When examined by specific occupational groups, the same trends somewhat remained, as shown in Tables 10 and 11. The chi-square (X^2)

TABLE 8
PREFERRED OUTDOOR RECREATION ACTIVITY IF THE INDIVIDUAL HAD
3 HOURS OF ADDITIONAL LEISURE TIME DAILY, BY ALL
RESPONDENTS, BOTH NONFARM AND
FARM SAMPLES

	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Nonfarm (N = 117)	12%	64%	4%	16%	4%	100%
Farm (N = 123)	9%	52%	18%	20%	1%	100%

TABLE 9
PREFERRED OUTDOOR RECREATION ACTIVITY IF THE INDIVIDUAL HAD
3 HOURS OF ADDITIONAL LEISURE TIME DAILY,
BY GROUPED OCCUPATIONS^a

Occupations	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Professional, Manager and Laborer						
Nonfarm* (N = 118)	12%	72%	5%	9%	2%	100%
Farm** (N = 95)	10%	54%	21%	15%	0%	100%

^aIncludes Professional, Manager and Laborer categories.

*X² = 20.2 with 4 Degrees of Freedom significant at the .001 level.

**X² = 12.4 with 4 Degrees of Freedom significant at the .01 level.

TABLE 10

PREFERRED OUTDOOR RECREATION ACTIVITY IF THE INDIVIDUAL HAD
3 HOURS OF ADDITIONAL LEISURE TIME DAILY,
BY OCCUPATION, FOR THE NONFARM SAMPLE

Occupation	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Pro- fessional (N = 49)	14%	68%	6%	12%	0%	100%
Manager (N = 29)	21%	66%	0%	10%	3%	100%
Laborer (N = 73)	12%	71%	5%	10%	2%	100%

$\chi^2 = 4.9$ with 8 Degrees of Freedom not significant at the .05 level.

TABLE 11

PREFERRED OUTDOOR RECREATION ACTIVITY IF THE INDIVIDUAL HAD
3 HOURS OF ADDITIONAL LEISURE TIME DAILY,
BY OCCUPATION, FOR THE FARM SAMPLE

Occupation	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Pro- fessional (N = 23)	13%	35%	39%	13%	0%	100%
Manager (N = 36)	11%	56%	11%	22%	0%	100%
Laborer (N = 36)	6%	64%	20%	11%	0%	100%

$\chi^2 = 10.1$ with 6 Degrees of Freedom not significant at the .05 level.

analysis of both breakdowns was not significant at the .05 level. The non-farm Professionals expressed highest interest in water related activities at 68%, and were lowest in yard activity at 0%. The farm Professional group preferred equipment related activities at 35% preference, and also were lowest in yard activities at 0%. The nonfarm Manager group had 66% preference for water related activities, with 0% interest in equipment sport activities. The farm Manager group expressed 56% interest in water related activities and 0% in yard activities. The nonfarm Laborer group also had highest preference for water related activities at 71% and 2% for yard activities. Lastly, the farm Laborer group expressed 64% for water related activities and 0% for yard activities.

A further analysis of expressed preferences for leisure activities was conducted employing the previous five activities discussed, but considering preference if the respondents had 3 consecutive days off in a row to devote to leisure. The analysis considered total respondents, grouped occupations and specific occupations, as shown in Tables 12, 13, 14, and 15. The total respondents in both samples again expressed highest preference for water related activities, second highest for travel activities and lowest for equipment sports for the nonfarm group and yard activities for the farm group. Results are given in Table 12.

When consideration and analysis was made by grouped occupations, the nonfarm Professional, Manager and Laborer group expressed highest

TABLE 12

PREFERRED OUTDOOR RECREATION ACTIVITY IF THE INDIVIDUALS HAD
3 DAYS OFF IN A ROW, BY ALL RESPONDENTS,
BOTH NONFARM AND FARM SAMPLES

Respondents	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Nonfarm (N = 224)	5%	73%	1%	19%	2%	100%
Farm (N = 120)	4%	62%	7%	27%	0%	100%

TABLE 13

PREFERRED OUTDOOR RECREATION ACTIVITY IF THE INDIVIDUALS HAD
3 DAYS OFF IN A ROW, BY GROUPED OCCUPATIONS^a

Occupation	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Professional, Manager and Laborer						
Nonfarm (N = 153)	5%	77%	2%	15%	1%	100%
Farm (N = 93)	5%	66%	8%	21%	0%	100%

^aIncludes Professional, Manager and Laborer.

* $X^2 = 8.8$ with 4 Degrees of Freedom not significant at the .05 level.

** $X^2 = 9.6$ with 4 Degrees of Freedom significant at the .05 level.

TABLE 14
PREFERRED OUTDOOR RECREATION ACTIVITY IF THE INDIVIDUAL HAD
3 DAYS OFF IN A ROW, BY OCCUPATION,
FOR THE NONFARM SAMPLE

Occupation	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Pro- fessional (N = 51)	6%	75%	2%	15%		100%
Manager (N = 30)	10%	80%	0%	10%		100%
Laborer (N = 73)	4%	75%	3%	16%		100%

$\chi^2 = 3.7$ with 8 Degrees of Freedom not significant at the .05 level.

TABLE 15
PREFERRED OUTDOOR RECREATION ACTIVITY IF THE INDIVIDUAL HAD
3 DAYS OFF IN A ROW, BY OCCUPATION,
FOR THE FARM SAMPLE

Occupation	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Pro- fessional (N = 23)	4%	74%	9%	13%	0%	100%
Manager (N = 35)	3%	57%	6%	34%	0%	100%
Laborer (N = 35)	9%	68%	9%	14%	0%	100%

$\chi^2 = 6.3$ with 6 Degrees of Freedom not significant at the .05 level.

preference for water related activities, and lowest expressed for yard activities. The farm group expressed highest preference for water related activities and lowest preference for yard activities. Results of these comparisons are given in Table 13. Chi-square significance analyses were made on both grouped occupations, and found to be significant at the .05 level for the farm sample, but not for the nonfarm sample.

When analysis was conducted on the specific occupational groups, minor deviations were found, as given in Tables 14 and 15. Chi-square significance analysis were made on both groups, and not found to be significant at the .05 level. But nonfarm and farm Professionals expressed similar preferences for water related activities (75% and 74% respectively) with lowest preference for yard activities (2% and 0% respectively). Nonfarm Managers expressed 80% preference for water related activities, with 0% for both equipment sports and yard activities. However, the farm Manager preferred water related the highest with 57%, but expressed 34% preference for travel activities, and 0% for yard activities. Concluding this area, the nonfarm and farm Laborer preferred water activities 75% to 68% and yard activity least, 2% and 0%.

The analysis of the data next moved into the area in considering actual participation in the sports, water activities, equipment sports, travel and yard activities. To begin this analysis, overall comparisons were made for the entire sample and by grouping the three occupational categories together. These results can be seen in Table 16. The actual participation in

TABLE 16

OUTDOOR RECREATION ACTIVITY PARTICIPATED IN MOST

DURING THE YEAR BY ALL RESPONDENTS,

BOTH NONFARM AND FARM SAMPLES

Respondents	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Nonfarm (N = 233)	8%	63%	1%	12%	16%	100%
Farm (N = 117)	8%	55%	10%	26%	1%	100%

the five areas was fairly close to what the total respondents preferred if they had the 3 hours (Table 8) or 3 days (Table 12) of leisure time. In the nonfarm category, 63% actually participated in water related activities, with some 16% in yard activities and lowest participation was found in equipment sports. The farm sample overall had slightly different participation, with 55% actually participated in water related activities, a relatively high 26% in travel related activities and a predictable low 1% in yard activities.

When the grouped occupations were considered (Professional, Manager and Laborer) the above mentioned pattern held, as shown in Table 17. That is, the three occupation categories in the nonfarm sample participated in 1) water activity, 2) sports and 3) equipment sports. The three groups from the farm sample participated in 1) water activity, 2) travel and 3) yard activity. Chi-square significance analyses of both grouped occupations were made and

TABLE 17
OUTDOOR RECREATION ACTIVITY PARTICIPATED IN MOST
DURING THE YEAR BY GROUPED OCCUPATIONS,^a
BOTH NONFARM AND FARM SAMPLES

Occupations	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Professional, Manager and Laborer						
Nonfarm (N = 152)	9%	73%	2%	9%	7%	100%
Farm (N = 91)	9%	58%	12%	21%	0%	100%

^aIncludes Professional, Manager and Laborer Categories.

* $X^2 = 31.5$ with 4 Degrees of Freedom significant at the .001 level.

** $X^2 = 9.6$ with 4 Degrees of Freedom significant at the .05 level.

found to be significant at the .001 level for the nonfarm group and significant at the .05 level for the farm group.

When actual comparison and tests of the three selected occupational categories were conducted, the overall trend continued to be found (Tables 18 and 19). That is, the Professional nonfarmers participated in 1) water activities, 2) travel and 3) yard activity. The Professional farmers participated in 1) water activity, 2) sports and 3) yard activity. The Manager group for nonfarmers was active in 1) water activity, 2) sports and 3) yard activity. The comparable Managers of the farm group participated in 1) water activity, 2) travel and 3) yard activity. Laborer groups of the nonfarm sample showed activity most in 1) water activity, 2) travel and 3) yard activity. The Laborers

TABLE 18

OUTDOOR RECREATION ACTIVITY PARTICIPATED IN MOST

DURING THE YEAR, BY OCCUPATION,

FOR THE NONFARM SAMPLE

Occupation	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Professional	14%	63%	4%	17%	2%	100%
Manager	24%	70%	3%	3%	0%	100%
Laborer	7%	71%	1%	18%	3%	100%

$\chi^2 = 11.0$ with 8 Degrees of Freedom not significant at the .05 level.

TABLE 19

OUTDOOR RECREATION ACTIVITY PARTICIPATED IN MOST

DURING THE YEAR, BY OCCUPATION,

FOR THE FARM SAMPLE

Occupation	Sports	Water Activity	Equipment Sports	Travel	Yard Activity	Total
Professional	4%	39%	22%	34%	0%	100%
Manager	15%	56%	6%	23%	0%	100%
Laborer	6%	73%	9%	9%	0%	100%

$\chi^2 = 12.5$ with 6 Degrees of Freedom significant at the .05 level.

of the farm group noted 1) water activity, 2) tie for equipment sports and travel, and 3) yard activity. The farm group chi-square value and 12.5 was found to be statistically significant at the .05 level.

A summary version of these preferences, and actual participation ranking for the two samples, including the specific occupational breakdown, are given in Tables 20, 21, and 22.

Findings of Water Based Outdoor Recreation Activities and Occupation

The central emphasis of the study focused on the specific recreation activities at various reservoirs of the Weber Basin Project. This would also seem to be the most logical emphasis, since the respondents, both nonfarm and farm highly favored water related activities over other possible alternatives as both outdoor recreation preferences and actual activities attempted. The main emphasis focused on the activities of fishing, swimming, water fowl hunting, boating, water skiing, picnicking, camping and sightseeing. The participation in each activity was measured as well as the enjoyment of the activity. Thus, analyses were made of the total respondents, grouped occupations (Professional, Manager and Laborer), and the three separate occupations of Professional Manager and Laborer for both the nonfarm and farm samples. These occupations were compared with the participation and enjoyment measures of the eight water based outdoor recreation activities.

TABLE 20

RANK ORDER OF OUTDOOR RECREATION ACTIVITIES BY
GROUPED OCCUPATIONS⁺, BOTH PREFERRED AND
ACTUAL ACTIVITIES. INCLUDES NONFARM AND
FARM SAMPLE.

Nonfarm	Farm
A. <u>If the individual had 3 additional hours of leisure time</u>	A. <u>If the individual had 3 additional hours of leisure time</u>
1. Water activities	1. Water activities
2. Sports	2. Equipment Sports
3. Travel	3. Travel
4. Equipment Sports	4. Sports
5. Yard activity	5. Yard activity
B. <u>If the individual had 3 additional days of leisure time</u>	B. <u>If the individual had 3 additional days of leisure time</u>
1. Water activities	1. Water activities
2. Travel	2. Travel
3. Sports	3. Equipment Sports
4. Equipment Sports	4. Sports
5. Yard activity	5. Yard activity
C. <u>Actual participation in activities</u>	C. <u>Actual participation in activities</u>
1. Water activities	1. Water activities
2. Travel Tie	2. Travel
3. Sports	3. Equipment Sports
4. Yard activity	4. Sports
5. Equipment Sports	5. Yard activity

⁺Includes Professional, Manager and Laborer Categories.

TABLE 21

RANK ORDER OF OUTDOOR RECREATION ACTIVITIES BY
OCCUPATION, OF PREFERRED LEISURE ACTIVITIES.
INCLUDES NONFARM AND FARM SAMPLE.

Nonfarm	Farm
<p>A. <u>Professional</u> (If the individual had 3 additional hours of leisure time)</p> <ol style="list-style-type: none"> 1. Water activities 2. Sports 3. Travel 4. Equipment sports 5. Yard activity 	<p>A. <u>Professional</u> (If the individual had 3 additional hours of leisure time)</p> <ol style="list-style-type: none"> 1. Equipment sports 2. Water activity 3. Sports Tie 4. Travel 5. Yard activity
<p>B. <u>Manager</u> (If the individual had 3 additional hours of leisure time)</p> <ol style="list-style-type: none"> 1. Water activities 2. Sports 3. Travel 4. Yard activity 5. Equipment sports 	<p>B. <u>Manager</u> (If the individual had 3 additional hours of leisure time)</p> <ol style="list-style-type: none"> 1. Water activities 2. Travel 3. Sports 4. Equipment sports Tie 5. Yard activity
<p>C. <u>Laborer</u> (If the individual had 3 additional hours of leisure time)</p> <ol style="list-style-type: none"> 1. Water activities 2. Sports 3. Travel 4. Equipment sports 5. Yard activity 	<p>C. <u>Laborer</u> (If the individual had 3 additional hours of leisure time)</p> <ol style="list-style-type: none"> 1. Water activities 2. Equipment sports 3. Travel 4. Sports 5. Yard activity

TABLE 22

RANK ORDER OF OUTDOOR RECREATION ACTIVITIES BY
OCCUPATION, OF ACTUAL ACTIVITIES OVER ONE YEAR
PERIOD. INCLUDES NONFARM AND FARM SAMPLE.

Nonfarm	Farm
A. <u>Professional</u> (Actual Participation)	A. <u>Professional</u> (Actual Participation)
1. Water activities	1. Water activities
2. Travel	2. Travel
3. Sports	3. Equipment sports
4. Equipment sports	4. Sports
5. Yard activity	5. Yard activity
B. <u>Manager</u> (Actual Participation)	B. <u>Manager</u> (Actual Participation)
1. Water activities	1. Water activities
2. Sports	2. Travel
3. Equipment sports Tie	3. Sports
4. Sports	4. Equipment sports
5. Yard activity	5. Yard activity
C. <u>Laborer</u> (Actual Participation)	C. <u>Laborer</u> (Actual Participation)
1. Water activities	1. Water activities
2. Travel	2. Travel
3. Sports	3. Equipment sports Tie
4. Yard activity	4. Sports
5. Equipment sports	5. Yard activity

Therefore, three hypotheses were examined in this phase of the analysis. These considered the participation rates of the three separate occupational categories of the nonfarm sample. 1) "Nonfarm Professionals will have high participation rates in outdoor recreation activities." 2. "Nonfarm Managers will have high participation rates in outdoor recreation activities." 3. "Nonfarm Laborers will have low participation rates in outdoor recreation activities."

These hypotheses were defined operationally previously. That is, in order for the Professional and Manager hypotheses to be supported, a mean score of less than 3 was necessary for a "high" participation rate. The Laborer category needed to have a mean score of more than 3 for a "low" participation rate.

In addition, in order to obtain a "high" or "low" rating, the respondents needed to score less than 3 or more than 3 in at least four of the eight activities measured in order to be considered a "high" or "low" participant.

Although these three hypotheses were tested, measures and analyses were made for the same occupational breakdown for the farm sample, as well as analyses were made on levels of enjoyment for both samples. Thus each activity per se and level of enjoyment was a separate item to be analyzed. The results of the comprehensive analysis are shown in Tables 23-38.

Statistically significant differences were found between the mean scores for the nonfarm sample in fishing, camping, and sightseeing participation, and in sightseeing level of enjoyment. The farm breakdown was

TABLE 23

PARTICIPATION IN A FISHING ACTIVITY OVER A ONE YEAR
PERIOD BY TOTAL RESPONDENTS, GROUPED OCCUPA-
TIONS, AND OCCUPATION, WITH 1=WEEKLY PARTICI-
PATION AND 5=NO PARTICIPATION. INCLUDES
NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm (210)	4.4	2.7
Farm (97)	3.5	1.6
<u>Grouped Occupations</u>		
Nonfarm (139)	4.0	2.6
Farm (77)	3.5	1.5
<u>Occupation</u>		
+Nonfarm		
Professional (43)	4.3	2.9
Manager (29)	3.4	2.1
Laborer (67)	4.1	2.6
++Farm		
Professional (17)	3.4	1.1
Manager (30)	3.9	1.7
Laborer (30)	3.1	1.5

+F = 4.4 significant at the .01 level.

++F = 1.28 not significant at the .05 level.

TABLE 24

LEVEL OF ENJOYMENT OF THE FISHING ACTIVITY BY THE

TOTAL RESPONDENTS, GROUPED OCCUPATIONS,

AND OCCUPATION, WITH 1=LEAST ENJOYMENT

AND 5=MOST ENJOYMENT OF THE ACTIVITY.

INCLUDES NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm	3.8	1.3
Farm	3.8	1.2
<u>Grouped Occupations</u>		
Nonfarm	3.9	1.2
Farm	3.8	1.2
<u>Occupation</u>		
+Nonfarm		
Professional	3.8	1.2
Manager	3.9	1.3
Laborer	4.0	1.2
++Farm		
Professional	3.4	1.2
Manager	3.9	1.2
Laborer	3.9	1.3

+F = 1.0 not significant at the .05 level.

++F = 1.0 not significant at the .05 level.

TABLE 25

PARTICIPATION IN A SWIMMING ACTIVITY OVER A ONE YEAR
PERIOD BY TOTAL RESPONDENTS, GROUPED OCCUPA-
TIONS, AND OCCUPATION, WITH 1=WEEKLY PARTICI-
PATION AND 5=NO PARTICIPATION. INCLUDES
NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm (146)	3.8	1.7
Farm (59)	4.4	1.5
<u>Grouped Occupations</u>		
Nonfarm (105)	3.6	1.7
Farm (48)	4.4	1.5
<u>Occupation</u>		
+Nonfarm		
Professional (33)	3.6	1.6
Manager (21)	3.5	1.9
Laborer (51)	3.9	1.6
++Farm		
Professional (13)	4.0	1.0
Manager (15)	4.2	1.7
Laborer (20)	4.7	1.7

+F = .39 not significant at the .05 level.

++F = .62 not significant at the .05 level.

TABLE 26

LEVEL OF ENJOYMENT OF THE SWIMMING ACTIVITY BY THE
 TOTAL RESPONDENTS, GROUPED OCCUPATIONS,
 AND OCCUPATION, WITH 1=LEAST ENJOYMENT
 AND 5=MOST ENJOYMENT OF THE ACTIVITY.
 INCLUDES NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm	3.1	1.4
Farm	2.5	1.1
<u>Grouped Occupations</u>		
Nonfarm	3.0	1.3
Farm	2.5	1.0
<u>Occupation</u>		
+ <u>Nonfarm</u>		
Professional	3.0	1.3
Manager	2.4	1.2
Laborer	3.1	1.4
++ <u>Farm</u>		
Professional	2.4	1.7
Manager	2.5	1.0
Laborer	2.7	1.1

+F = 2.4 not significant at the .05 level.

++F = .20 not significant at the .05 level.

TABLE 27

PARTICIPATION IN A HUNTING ACTIVITY OVER A ONE YEAR
PERIOD BY TOTAL RESPONDENTS, GROUPED OCCUPA-
TIONS, AND OCCUPATION, WITH 1=WEEKLY PARTICI-
PATION AND 5=NO PARTICIPATION. INCLUDES
NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm (89)	3.6	1.8
Farm (65)	4.4	1.6
<u>Grouped Occupations</u>		
Nonfarm (72)	3.6	1.6
Farm (51)	4.4	1.6
<u>Occupation</u>		
++Nonfarm		
Professional (26)	3.2	1.6
Manager (17)	3.6	1.9
Laborer (29)	3.9	1.8
++Farm		
Professional (11)	3.8	1.8
Manager (22)	4.9	1.2
Laborer (18)	4.2	1.7

+F = .75 not significant at the .05 level.

++F = 1.2 not significant at the .05 level.

TABLE 28

LEVEL OF ENJOYMENT OF THE HUNTING ACTIVITY BY THE
TOTAL RESPONDENTS, GROUPED OCCUPATIONS,
AND OCCUPATION, WITH 1=LEAST ENJOYMENT
AND 5=MOST ENJOYMENT OF THE ACTIVITY.
INCLUDES NONFARM AND FARM SAMPLES.

<u>Total Respondents</u>		
Nonfarm	3.6	1.4
Farm	3.4	1.4
 <u>Grouped Occupations</u>		
Nonfarm	3.6	1.4
Farm	3.4	1.3
 <u>Occupation</u>		
<u>+Nonfarm</u>		
Professional	4.0	1.0
Manager	3.3	1.7
Laborer	3.4	1.5
 <u>++Farm</u>		
Professional	3.6	1.4
Manager	3.3	1.3
Laborer	3.5	1.5

+F = 1.2 not significant at the .05 level.

++F = .09 not significant at the .05 level.

TABLE 29

PARTICIPATION IN A BOATING ACTIVITY OVER A ONE YEAR
PERIOD BY TOTAL RESPONDENTS, GROUPED OCCUPA-
TIONS, AND OCCUPATION, WITH 1=WEEKLY PARTICI-
PATION AND 5=NO PARTICIPATION. INCLUDES
NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm (160)	3.4	1.6
Farm (85)	3.6	1.6
<u>Grouped Occupations</u>		
Nonfarm (114)	3.3	1.5
Farm (66)	3.5	1.6
<u>Occupation</u>		
+Nonfarm		
Professional (40)	3.3	1.7
Manager (25)	2.8	1.5
Laborer (49)	3.4	1.4
++Farm		
Professional (17)	3.5	1.1
Manager (21)	3.7	1.8
Laborer (28)	3.3	1.8

+F = 1.3 not significant at the .05 level.

++F = .45 not significant at the .05 level.

TABLE 30

LEVEL OF ENJOYMENT OF THE BOATING ACTIVITY BY THE

TOTAL RESPONDENTS, GROUPED OCCUPATIONS,

AND OCCUPATION, WITH 1=LEAST ENJOYMENT

AND 5=MOST ENJOYMENT OF THE ACTIVITY.

INCLUDES NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm	3.7	1.3
Farm	3.6	1.3
<u>Grouped Occupations</u>		
Nonfarm	3.8	1.2
Farm	3.6	1.3
<u>Occupation</u>		
+Nonfarm		
Professional	3.9	1.1
Manager	3.7	1.3
Laborer	3.8	1.3
++Farm		
Professional	3.5	1.3
Manager	3.8	1.4
Laborer	3.6	1.2

+F = .85 not significant at the .05 level.

++F = .13 not significant at the .05 level.

TABLE 31

PARTICIPATION IN A WATER SKIING ACTIVITY OVER A ONE YEAR

PERIOD BY TOTAL RESPONDENTS, GROUPED OCCUPA-

TIONS, AND OCCUPATION, WITH 1=WEEKLY PARTICI-

PATION AND 5=NO PARTICIPATION. INCLUDES

NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm (78)	3.8	1.8
Farm (38)	4.2	1.7
<u>Grouped Occupations</u>		
Nonfarm (65)	3.7	1.7
Farm (32)	4.2	1.8
<u>Occupation</u>		
+Nonfarm		
Professional (24)	4.1	1.7
Manager (17)	3.2	1.8
Laborer (24)	4.0	1.7
++Farm		
Professional (9)	4.1	1.6
Manager (12)	4.0	1.8
Laborer (11)	4.5	2.0

+F = 1.0 not significant at the .05 level.

++F = .19 not significant at the .05 level.

TABLE 32

LEVEL OF ENJOYMENT OF THE WATER SKING ACTIVITY BY THE

TOTAL RESPONDENTS, GROUPED OCCUPATIONS,

AND OCCUPATION, WITH 1=LEAST ENJOYMENT

AND 5=MOST ENJOYMENT OF THE ACTIVITY.

INCLUDES NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm	3.7	1.4
Farm	3.4	1.3
<u>Grouped Occupations</u>		
Nonfarm	3.6	1.4
Farm	3.5	1.1
<u>Occupation</u>		
+Nonfarm		
Professional	3.5	1.5
Manager	4.0	1.2
Laborer	3.5	1.5
++Farm		
Professional	3.5	1.2
Manager	3.2	1.1
Laborer	4.0	1.3

+F = .50 not significant at the .05 level.

++F = .54 not significant at the .05 level.

TABLE 33

PARTICIPATION IN A PICNICKING ACTIVITY OVER A ONE YEAR
PERIOD BY TOTAL RESPONDENTS, GROUPED OCCUPA-
TIONS, AND OCCUPATION, WITH 1=WEEKLY PARTICI-
PATION AND 5=NO PARTICIPATION. INCLUDES
NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm (215)	2.9	1.4
Farm (109)	3.2	1.5
<u>Grouped Occupations</u>		
Nonfarm (140)	2.7	1.3
Farm (84)	3.0	1.4
<u>Occupation</u>		
+Nonfarm		
Professional (43)	2.7	1.3
Manager (29)	2.4	1.3
Laborer (68)	2.8	1.4
++Farm		
Professional (22)	3.1	1.1
Manager (27)	3.4	1.6
Laborer (35)	2.8	1.3

+F = 2.4 not significant at the .05 level.

++F = 2.2 not significant at the .05 level.

TABLE 34

LEVEL OF ENJOYMENT OF THE PICNICKING ACTIVITY BY THE
TOTAL RESPONDENTS, GROUPED OCCUPATIONS,
AND OCCUPATION, WITH 1=LEAST ENJOYMENT
AND 5=MOST ENJOYMENT OF THE ACTIVITY.
INCLUDES NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm	3.8	1.1
Farm	3.8	1.2
<u>Grouped Occupations</u>		
Nonfarm	3.9	1.0
Farm	3.8	1.1
<u>Occupation</u>		
+Nonfarm		
Professional	3.7	1.0
Manager	3.9	1.2
Laborer	3.9	1.0
++Farm		
Professional	4.2	1.0
Manager	3.2	1.3
Laborer	4.0	1.0

+F = .31 not significant at the .05 level.

++F = 4.4 significant at the .05 level.

TABLE 35

PARTICIPATION IN A CAMPING ACTIVITY OVER A ONE YEAR
PERIOD BY TOTAL RESPONDENTS, GROUPED OCCUPA-
TIONS, AND OCCUPATION, WITH 1=WEEKLY PARTICI-
PATION AND 5=NO PARTICIPATION. INCLUDES
NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm (183)	3.1	1.6
Farm (94)	3.4	1.6
<u>Grouped Occupations</u>		
Nonfarm (126)	2.9	1.5
Farm (76)	3.4	1.5
<u>Occupation</u>		
+Nonfarm		
Professional (42)	2.9	1.5
Manager (27)	3.0	1.3
Laborer (57)	2.9	1.6
++Farm		
Professional (18)	3.1	1.4
Manager (24)	3.9	1.5
Laborer (34)	3.1	1.5

+F = 2.8 significant at the .05 level.

++F = 1.6 not significant at the .05 level.

TABLE 36

LEVEL OF ENJOYMENT OF THE CAMPING ACTIVITY BY THE
TOTAL RESPONDENTS, GROUPED OCCUPATIONS,
AND OCCUPATION, WITH 1=LEAST ENJOYMENT
AND 5=MOST ENJOYMENT OF THE ACTIVITY.
INCLUDES NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm	4.0	1.2
Farm	4.1	1.0
<u>Grouped Occupations</u>		
Nonfarm	4.0	1.1
Farm	4.1	1.0
<u>Occupation</u>		
+Nonfarm		
Professional	4.0	1.1
Manager	4.0	1.2
Laborer	4.1	1.2
++Farm		
Professional	4.1	1.1
Manager	3.9	1.0
Laborer	4.4	1.0

+F = .41 not significant at the .05 level.

++F = 1.1 not significant at the .05 level.

TABLE 37

PARTICIPATION IN A SIGHTSEEING ACTIVITY OVER A ONE YEAR
PERIOD BY TOTAL RESPONDENTS, GROUPED OCCUPA-
TIONS, AND OCCUPATION, WITH 1=WEEKLY PARTICI-
PATION AND 5=NO PARTICIPATION. INCLUDES
NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm (226)	2.6	1.4
Farm (119)	3.0	1.5
<u>Grouped Occupations</u>		
Nonfarm (145)	2.4	1.3
Farm (90)	2.9	1.4
<u>Occupation</u>		
++Nonfarm		
Professional (44)	2.2	1.1
Manager (30)	2.6	1.4
Laborer (71)	2.4	1.3
++Farm		
Professional (22)	2.7	1.4
Manager (33)	3.2	1.6
Laborer (35)	2.7	1.1

+F = 4.0 significant at the .01 level.

++F = 1.8 not significant at the .05 level.

TABLE 38

LEVEL OF ENJOYMENT OF THE SIGHTSEEING ACTIVITY BY THE
 TOTAL RESPONDENTS, GROUPED OCCUPATIONS,
 AND OCCUPATION, WITH 1=LEAST ENJOYMENT
 AND 5=MOST ENJOYMENT OF THE ACTIVITY.
 INCLUDES NONFARM AND FARM SAMPLES.

Respondents	Mean Scores	Standard Deviation
<u>Total Respondents</u>		
Nonfarm	4.0	1.1
Farm	3.7	1.1
<u>Grouped Occupations</u>		
Nonfarm	3.9	1.1
Farm	3.6	1.1
<u>Occupation</u>		
+Nonfarm		
Professional	3.7	1.2
Manager	4.1	1.0
Laborer	3.9	1.1
++Farm		
Professional	4.1	1.0
Manager	3.2	1.3
Laborer	3.7	1.0

+F = 3.4 significant at the .05 level.

++F = 5.2 significant at the .01 level.

statistically significant for only levels of enjoyment in picnicking and sightseeing. A discussion of these few differences and similarities will be undertaken in the next chapter.

A rank ordering of the participation in the activities and the levels of enjoyment are given in Tables 39-43. The results of Table 39 show for all respondents of the two samples, the nonfarm participated in sightseeing the most, and found the highest enjoyment levels there, while fishing least and enjoying swimming the least. The farm respondents also participated most in sightseeing, while ranking enjoyment of camping the highest. They also both participated the least in swimming and enjoyed it the least.

When the Professional, Manager and Laborer occupations were grouped, the nonfarm group participated the most in sightseeing and enjoyed camping the most. Fishing was participated in the least and swimming was enjoyed the least. The farm group also participated the most in sightseeing and enjoyed camping the most, while participating the least in swimming and hunting, and enjoyed swimming the least. The results are shown in Table 40.

When examined by specific occupation, the nonfarm Professional participated the most in sightseeing and enjoyed hunting the most, while fishing the least and enjoying swimming the least. The farm Professional category participated the most in sightseeing and enjoyed picnicking the most, but spent less time in waterskiing, and enjoyed swimming the least. These results are shown in Table 41.

TABLE 39

RANK ORDER OF PARTICIPATION IN RESERVOIR RELATED RECREATION

ACTIVITIES AND ACTIVITY ENJOYMENT BY ALL RESPONDENTS,

INCLUDING NONFARM AND FARM SAMPLES.

Nonfarm Sample						Farm Sample					
Activity*	Mean	Rank	Enjoyment**	Mean	Rank	Activity*	Mean	Rank	Enjoyment**	Mean	Rank
Sightseeing	2.6	1	Sightseeing	4.0	1	Sightseeing	4.0	1	Camping	4.1	1
Picnicking	2.9	2	Camping	4.0	1	Camping	4.0	1	Fishing	3.8	2
Camping	3.1	3	Picnicking	3.8	2	Picnicking	3.8	2	Picnicking	3.8	2
Boating	3.4	4	Fishing	3.8	2	Fishing	3.8	2	Sightseeing	3.7	3
Hunting	3.6	5	Boating	3.7	3	Boating	3.7	3	Boating	3.6	4
Water Skiing	3.8	6	Water Skiing	3.7	3	Water Skiing	3.7	3	Hunting	3.4	5
Swimming	3.8	6	Hunting	3.6	4	Hunting	3.6	4	Water Skiing	3.4	5
Fishing	4.4	7	Swimming	3.1	5	Swimming	3.1	5	Swimming	2.5	6

*1 = most activity, 5 = least activity.

**1 = least enjoyment, 5 = most enjoyment.

TABLE 40

RANK ORDER OF PARTICIPATION IN RESERVOIR RELATED RECREATION

ACTIVITIES AND ACTIVITY ENJOYMENT BY GROUPED OCCUPATIONS,^a

INCLUDING NONFARM AND FARM SAMPLES.

Nonfarm						Farm Sample					
Activity*	Mean	Rank	Enjoyment**	Mean	Rank	Activity*	Mean	Rank	Enjoyment**	Mean	Rank
Sightseeing	2.4	1	Camping	4.0	1	Sightseeing	2.9	1	Camping	4.1	1
Picnicking	2.7	2	Sightseeing	3.9	2	Picnicking	3.0	2	Fishing	3.8	2
Camping	2.9	3	Picnicking	3.9	2	Camping	3.4	3	Picnicking	3.8	2
Boating	3.3	4	Fishing	3.9	2	Boating	3.5	4	Sightseeing	3.6	3
Hunting	3.6	5	Boating	3.8	3	Fishing	3.5	4	Boating	3.6	3
Swimming	3.6	5	Water Skiing	3.6	4	Water Skiing	4.2	5	Water Skiing	3.5	4
Water Skiing	3.7	6	Hunting	3.6	4	Swimming	4.4	6	Hunting	3.4	5
Fishing	4.0	7	Swimming	3.0	5	Hunting	4.4	6	Swimming	2.5	6

^aIncludes Professional, Manager and Labor Categories.

*1 = most activity, 5 = least activity.

**1 = least enjoyment, 5 = most enjoyment.

TABLE 41

RANK ORDER OF PARTICIPATION IN RESERVOIR RELATED RECREATION
 ACTIVITIES AND ACTIVITY ENJOYMENT BY PROFESSIONALS,
 INCLUDING NONFARM AND FARM SAMPLES.

Nonfarm Sample						Farm Sample					
Activity*	Mean	Rank	Enjoyment**	Mean	Rank	Activity*	Mean	Rank	Enjoyment**	Mean	Rank
Sightseeing	2.2	1	Hunting	4.0	1	Sightseeing	2.7	1	Picnicking	4.2	1
Picnicking	2.7	2	Camping	4.0	1	Camping	3.1	2	Camping	4.1	2
Camping	2.9	3	Boating	3.9	2	Picnicking	3.1	2	Sightseeing	4.1	2
Hunting	3.2	4	Fishing	3.8	3	Fishing	3.4	3	Hunting	3.6	3
Boating	3.3	5	Picnicking	3.7	4	Boating	3.5	4	Boating	3.5	4
Swimming	3.6	6	Sightseeing	3.7	4	Hunting	3.8	5	Water Skiing	3.5	4
Water Skiing	4.1	7	Water Skiing	3.5	5	Swimming	4.0	6	Fishing	3.4	5
Fishing	4.3	8	Swimming	3.0	6	Water Skiing	4.1	7	Swimming	2.4	6

*1 = most activity, 5 = least activity.

**1 = least enjoyment, 5 = most enjoyment.

TABLE 42

RANK ORDER OF PARTICIPATION IN RESERVOIR RELATED RECREATION

ACTIVITIES AND ACTIVITY ENJOYMENT BY MANAGERS,

INCLUDING NONFARM AND FARM SAMPLES.

Nonfarm Sample						Farm Sample					
Activity*	Mean	Rank	Enjoyment**	Mean	Rank	Activity*	Mean	Rank	Enjoyment**	Mean	Rank
Picnicking	2.4	1	Sightseeing	4.1	1	Sightseeing	3.2	1	Fishing	3.9	1
Sightseeing	2.6	2	Camping	4.0	2	Picnicking	3.4	2	Camping	3.9	1
			Water								
Boating	2.8	3	Skiing	4.0	2	Boating	3.7	3	Boating	3.8	2
Camping	3.0	4	Fishing	3.9	3	Fishing	3.9	4	Hunting	3.3	3
Water											
Skiing	3.2	5	Picnicking	3.9	3	Camping	3.9	4	Picnicking	3.2	4
						Water			Water		
Fishing	3.4	6	Boating	3.7	4	Skiing	4.0	5	Skiing	3.2	4
Swimming	3.5	7	Hunting	3.3	5	Swimming	4.2	6	Sightseeing	3.2	4
Hunting	3.6	8	Swimming	2.4	6	Hunting	4.9	7	Swimming	2.5	5

*1 = most activity, 5 = least activity.

**1 = least enjoyment, 5 = most enjoyment.

TABLE 43

RANK ORDER OF PARTICIPATION IN RESERVOIR RELATED RECREATION

ACTIVITIES AND ACTIVITY ENJOYMENT BY LABORERS,

INCLUDING NONFARM AND FARM SAMPLES.

Nonfarm Sample						Farm Sample					
Activity*	Mean	Rank	Activity*	Mean	Rank	Activity*	Mean	Rank	Activity*	Mean	Rank
Sightseeing	2.4	1	Camping	4.1	1	Sightseeing	2.7	1	Camping	4.4	1
Picnicking	2.8	2	Fishing	4.0	2	Picnicking	2.8	2	Water Skiing	4.0	2
Camping	2.9	3	Sightseeing	3.9	3	Camping	3.1	3	Picnicking	4.0	2
Boating	3.4	4	Picnicking	3.9	3	Fishing	3.1	3	Sightseeing	3.9	3
Hunting	3.9	5	Boating	3.8	4	Boating	3.3	4	Fishing	3.9	3
Swimming	3.9	5	Water Skiing	3.5	5	Hunting	4.2	5	Boating	3.6	4
Water Skiing	4.0	6	Hunting	3.4	6	Water Skiing	4.5	6	Hunting	3.5	5
Fishing	4.1	7	Swimming	3.1	7	Swimming	4.7	7	Swimming	2.7	6

*1 = most activity, 5 = least activity.

**1 = least enjoyment, 5 = most enjoyment.

The nonfarm Managers participated the most in picnicking and enjoyed sightseeing the most, while hunting least and enjoying swimming the least. The farm Managers participated the most in sightseeing and enjoyed fishing the most, while also hunting least and also enjoying swimming least. The results are shown in Table 42.

In conclusion of this phase of the analysis, it was noted that the non-farm Laborer participated in sightseeing the most and enjoyed camping the greatest, while participating least in fishing and enjoying swimming the least. The farm Laborers also participated most in sightseeing and enjoyed camping the greatest, and spent less time swimming and also enjoyed it least. These results are shown in Table 43.

Of particular interest at this point is the overwhelming participation by all categories in sightseeing, camping and picnicking, with high enjoyment in camping and fishing, and unanimous least enjoyment in swimming.

Therefore, in terms of hypotheses testing, the results are shown in the three previous tables. That is, the results in Table 41 show that the non-farm Professional obtained a mean score of less than 3 in three of the eight measured activities. In order for the hypothesis to be supported, the score of less than 3 should have been obtained in four of the eight activities. Therefore, the hypothesis "Nonfarm Professionals will have high participation rates in outdoor recreation activities" was not supported.

The results of Table 42 show that the nonfarm Managers also obtained mean scores of less than 3 in three of the eight measured activities. Therefore,

the hypothesis "Nonfarm Managers will have high participation rates in outdoor recreation activities" was not supported.

The results of measurements of the nonfarm Laborer activity are shown in Table 43. That is, the nonfarm Laborer scored more than 3 in five of the eight measured outdoor recreation activities. Thus the hypothesis "Nonfarm Laborers will have low participation rates in outdoor recreation activities" was supported.

It does seem important to note however, that the activity of the Professional and Manager categories obtained "near" support of the hypotheses tested. In addition, the farm Professional, Manager and Laborer groups scored much lower overall in participation than the nonfarm sample. Further discussion will be considered in the following chapter.

Findings of Factor Analysis of the Water Based Outdoor Recreation Activities and Levels of Enjoyment

Because of the spread of activities and correlations at the various reservoirs, a factor analysis was made of the nonfarm and farm samples. The overall purpose of the factor analysis was to analyze various correlations, in an attempt to determine commonalities in the two samples at all reservoirs. The specific purpose of this phase of the analysis was to provide insight in the overall activity and enjoyment of outdoor recreation activities by the two samples, rather than relate specifically to the hypotheses previously tested.

The results are shown in Tables 44-47. As noted in Table 44, the participation by nonfarm respondents show that the highest factor loadings centered in two main areas. First was the identification of Factor 1, which shows Waterskiing, Boating and Swimming to have the highest weightings, all three which can be described as Activities on the Water. Secondly, Factor 2 shows three highest weightings for Camping, Picnicking and a tie for Fishing and Sightseeing, which can be described as Activities by the Water. Thus the nonfarm respondents' activities tend to cluster into these two main, broad areas.

TABLE 44
FACTOR ANALYSIS OF PARTICIPATION IN RESERVOIR
RELATED ACTIVITIES BY THE NONFARM SAMPLE

	Factor Loading	
	<u>Activities on the Water</u>	<u>Activities by the Water</u>
	Factor 1	Factor 2
Fishing	.39	.67*
Swimming	.70*	.40
Hunting	.34	.36
Boating	.72*	.35
Waterskiing	.93*	.11
Picnicking	.48	.77*
Camping	.24	.91*
Sightseeing	.12	.67*

*Highest weightings.

Similar findings are noted for the farm sample, as noted in Table 45. That is, weightings in Factor 1 are highest for Waterskiing, Swimming, and Boating again Activities on the Water. Factor 2 weightings are highest for Camping, Fishing and Picnicking, or Activities by the Water. A third factor, Factor 3, emerged with identification of a single highest factor, Hunting. The farm sample then tends to cluster on the two main areas, as well as an addition cluster of hunting.

TABLE 45
FACTOR ANALYSIS OF PARTICIPATION IN RESERVOIR
RELATED ACTIVITIES BY THE FARM SAMPLE

	Factor Loading		
	<u>Activities on the Water</u> Factor 1	<u>Activities by the Water</u> Factor 2	<u>Hunting</u> Factor 3
Fishing	.11	.84*	.19
Swimming	.87*	.14	.30
Hunting	.15	.10	.79*
Boating	.83*	.51	.08
Waterskiing	.89*	.04	.23
Picnicking	.35	.55*	.10
Camping	.07	.98*	.15
Sightseeing	.21	.20	.52

*Highest weightings.

Additional analysis was made concerning the levels of enjoyment at the reservoirs. As shown in Table 46, Factor 1 for the nonfarm sample level of enjoyment clusters on Camping, Picnicking and Hunting, or Activities by the Water. Factor 2 emerged with highest loadings for Waterskiing, Boating and Swimming, or Activities on the Water. A third factor emerged with an high loading of Sightseeing. Thus two broad clusters stand out, with identification of a third, sightseeing for the nonfarm levels of enjoyment.

TABLE 46

FACTOR ANALYSIS OF ENJOYMENT OF RESERVOIR RELATED
ACTIVITIES BY THE NONFARM SAMPLE

	Factor Loading		
	<u>Activities by the Water</u> Factor 1	<u>Activities on the Water</u> Factor 2	<u>Sightseeing</u> Factor 3
Fishing	.40	.03	-.06
Swimming	-.02	.63*	-.14
Hunting	.41*	.28	-.19
Boating	.19	.64*	.31
Waterskiing	.05	.87*	-.03
Picnicking	.55*	.16	.38
Camping	.85*	.00	.49
Sightseeing	.00	-.05	.71*

*Highest weightings.

The farm sample clustering for levels of enjoyment are identified in Table 47. Factor 1 showed highest weightings for Waterskiing and Boating, for Activities on the Water. Factor 2 shows highest weightings for Camping, Picnicking and Fishing or Activities by the Water. A third factor, Hunting again emerged for the farm sample.

TABLE 47
FACTOR ANALYSIS OF ENJOYMENT OF RESERVOIR RELATED
ACTIVITIES BY THE FARM SAMPLE

	Factor Loading		
	<u>Activities on the Water</u> Factor 1	<u>Activities by the Water</u> Factor 2	<u>Hunting</u> Factor 3
Fishing	-.80	.52*	.09
Swimming	.32	-.28	-.48
Hunting	-.01	.19	.97*
Boating	.59*	.23	.20
Waterskiing	.89*	-.02	.20
Picnicking	.08	.75*	.01
Camping	-.08	.93*	.27
Sightseeing	.18	-.26	.31

*Highest weightings.

Thus in terms of overall participation by both samples, the activities on the water of waterskiing, swimming and boating emerge. A second factor of activities by the water of camping, fishing, picnicking and sightseeing was obtained.

In terms of factor analyses of enjoyment of activities, the same factors of "on the water" and "by the water" plus sightseeing and hunting emerged. Considerations and discussion of these and previous findings will follow in Chapter V.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

The purpose of this chapter is to discuss the previous findings in a more conclusive detail. This will involve consideration of specific hypotheses tested, as well as the implications of the elaboration process that accompanied working with the data.

This study included data analyses of two independent samples, referred to previously as nonfarm and farm sample. The nonfarm sample consisted of respondents who were engaged in various occupations, including those of Professionals, Managers and Laborers. The farm sample, on the other hand, consisted of individuals who were part and full-time farmers or farm managers and/or who also held full-time occupations of Professionals, Managers and Laborers. Thus the intent was to use two independent samples of 250 respondents from the nonfarm sample and 128 respondents from the farm sample and assess the similarities as well as differences from an occupational perspective. This was accomplished by analyses of all respondents from both samples, by considering the three occupations of Professionals, Managers and Laborers together, as well as separately.

I. The first section of the analyses began by examination of the leisure orientations of the nonfarm and farm samples. A respondent's leisure

orientation was assessed by the use of a leisure orientation scale. The scale responses ranged from 6 to 30. A score of 6 indicated a definite orientation or preference for work, while a score of 30 indicated a definite orientation or preference for leisure.

Mean scores for the nonfarm and farm samples were calculated and analyzed. The first hypothesis was found to be supported. That is, the nonfarm sample held a higher leisure orientation of 20.6, while the farm sample leisure orientation was lower with a mean score of 18.6. Thus the nonfarm sample was found to be more leisure oriented than the farm sample. When the scores of the three occupational groups of Professionals, Managers and Laborers were examined, the trend also held. The three nonfarm occupational groups had a mean score of 20.9, while the three farm occupational groups had a mean score of 18.5.

Following these comparisons, specific occupations were examined. The Laborer group had the highest leisure orientation for each sample, with the nonfarm Laborer mean score of 19.6. Professionals in both samples were second highest in terms of leisure orientation. The nonfarm Professional mean score was 20.6 and the farm Professional mean score was 19.1. The lowest scores were found to be those of the Managers of both samples. The nonfarm Managers' mean score was 20.3 and the farm Manager leisure orientation mean score was 17.1. The nonfarm occupations were not found to have statistically significant differences. However, the farm occupations were found to have statistically significant differences.

Thus, the nonfarm sample and grouped occupations had the higher leisure orientation than the farm sample and grouped occupations. By occupation, in both samples, the Laborer group was highest, followed by Professionals and last by Managers.

An important confirmation of Berger's (1962) theoretical views of leisure seems to emerge at this point. Although statistically significant differences were found among the Professional, Manager and Laborer respondents of the farm sample, the question of whether substantive difference exists needs to be addressed. The differences between means of leisure orientations for the specific occupational breakdown or by total respondents of the two samples ranges from a few tenths of a point to just over a 2 point difference.

Thus, even though statistically significant differences were found, actual differences between the leisure orientation of respondents were very small, with most scoring quite similarly. No large differences existed between specific occupational groups, or between nonfarm and farm respondents. Similar results were also found in the Andrews, Madsen and Dunaway (1973) study and in Dierker's (1977) work.

Thus, the current empirical finding seems to substantiate Berger's (1962) theoretical views of leisure, cited in Chapter I. That is, the value of leisure in the lives of Utah respondents seems to be fairly close and uniform, or "normative" as Berger felt. That is, somewhat universal and pervasive.

Leisure in fact seems to be fairly highly valued by all respondents, regardless of occupational differences.

Along with the foregoing analysis, the results of hypothetical and actual recreation activity situations were examined. Respondents of both samples were queried concerning interests in outdoor recreation activities if: 1) they had 3 hours of additional leisure time daily; 2) if they had 3 consecutive days of leisure and 3) what outdoor recreation activity they actually participated in, over a one year period.

No specific hypotheses were examined for these situations, rather this portion was conducted because of additional insight it potentially could provide in terms of understanding the actual activities of the two samples and specifically the activities of the three occupational groups of Professionals, Managers and Laborers.

In terms of recreation preferences and activities, overall interest centered on five areas: 1) sports (baseball, etc.), 2) water related activities (swimming, fishing, etc.), 3) equipment sports (snowmobiling, motor bike riding, etc.), 4) travel (by automobile, sightseeing, etc.), and 5) yard activities (recreation at home with family).

Respondents of the nonfarm and farm sample preferred water related activities if 3 hours of additional leisure time were available. The lowest preference was for yard activity for both samples, but much lower for the farm sample.

When the three major occupations were grouped, the nonfarm and farm respondents preferred water activities. The lowest preference by the two samples was for yard activities.

When specific occupations were examined, the following conclusions were found:

1. The nonfarm Professional preferred water activity first with sports being second. The farm Professional preferred equipment sports first and water activities for second choice.
2. The nonfarm Managers preferred water activity first and sports second. The farm Manager sample preferred water activity first and travel second.
3. The Laborer group from the nonfarm sample preferred water activity first and sports as second preference. The farm Laborer sample preferred water activity first and equipment sports second.

Thus, in terms of preference in outdoor recreation activities, the nonfarm group for all three occupational categories preferred water activities first and sports second of five major areas. The farm sample for all three occupational categories preferred a mix of equipment sports, water activities and travel of the five areas considered.

When the hypothetical situation was considered of having 3 consecutive days off in a row, the overall preference for both samples for all respondents, grouped occupations and specific occupations was water activities and travel.

The next phase of analysis examined the actual participation in the five identified recreation areas, covering a one year period.

1. The nonfarm Professional was most active in water activity and second most in travel. The farm Professional was most active in water activity and second most active in travel.

2. The nonfarm Manager most often participated in water activity and second most in sports. The farm Manager was most active in water activity and second most in travel.

3. The nonfarm Laborers participated most in water activity and second most in travel. On the other hand, the farm Laborer respondents participated most in water activity and second most in both equipment sports and travel. Significant statistical differences were found between the Professionals, Managers and Laborers of the farm sample, but not between the categories of the nonfarm sample.

Another important possible theoretical confirmation of work and leisure issues surfaced in this phase of the analyses. The nonfarm sample respondents had fairly high participation in recreation at home, or yard activity. The farm sample, on the other hand, had fairly high participation in equipment sports and travel activities.

Wilensky (1960) maintained that the nature of occupations in general may produce "spill-over" effects on non-work leisure time activities. Thus the job situation could possibly "carry-over" or result in similar leisure time uses as the job itself. This theoretical view may have some empirical support

from the current research effort. That is, the nonfarm respondents seem to hold a less active view of leisure by recreating in the yard, at home.

On the other hand, the farm respondents in general, with either part or full-time farming influences, involves the use of mechanical equipment at work and a more "user" orientation toward natural resources (Andrews, Madsen and Dunaway 1973). Thus the "spill-over" effect identified by Wilensky (1960) seems to be present with the fairly high participation in equipment sports and travel activities by the farm respondents. An additional confirmation in this area will be discussed in the consideration of the factor analysis findings.

II. The second section of the analysis provided a more indepth view of the three specific occupational categories and their relationship with water-based outdoor recreation participation. The recreation activities examined were fishing, swimming, waterfowl hunting, boating, waterskiing, picnicking, camping and sightseeing. Since the preference for additional activities, and actual activities participated in, were overwhelmingly water related recreation activities, the elaboration of this area was both necessary and logical.

Three hypotheses were tested concerning the rates of participation for the Professional, Manager and Laborer respondents of the nonfarm sample for the fishing through sightseeing activities. Of the analysis made in this area and activities examined, the following results were obtained.

1. The nonfarm Professionals and Managers were not found to have "high" participation rates. This was defined operationally as needing a mean

activity index score of less than 3.0 for four of the eight activities analyzed. Thus the hypotheses that the nonfarm Professionals and Managers would have high participation rates was not supported. However, the nonfarm Laborer was found to have "low" participation rates. This was defined operationally as needing a mean activity index score of more than 3.0 for four of the eight activities analyzed. Thus the hypothesis that the nonfarm Laborers would have low participation rates was supported.

It is necessary to note a limitation of this particular finding. The measures for participation ratings in the eight outdoor recreation activities were made from the 1-5 activity index response categories as explained in Chapter III. That is, the mean responses were more an index of activity than an actual measure of exact number of times participated in a specific outdoor recreation activity.

2. For the nonfarm sample, there was found to be statistically significant differences between Professional, Manager and Laborer respondents in activities of fishing, camping and sightseeing.

3. For the farm sample, there was not found to be statistically significant differences between the Professional, Manager and Laborer respondents in participation in various activities. Thus, the overall outdoor recreation participation appears to be more homogeneous for the farm occupational groups than that of the nonfarm occupational subsamples.

4. For the nonfarm sample, there was found to be statistically significant differences between Professional, Manager and Laborer

respondents with respect to the enjoyment of the sightseeing activity.

5. For the farm sample, there was found to be statistically significant differences between Professional, Manager and Laborer respondents with respect to the enjoyment of picnicking and sightseeing activities.

Overall, the Professionals, Managers and Laborers for both the nonfarm and farm samples participated the most in the following activities:

<u>Nonfarm</u>	<u>Activity</u>	<u>Farm</u>	<u>Activity</u>
Professional	Sightseeing	Professional	Sightseeing
Manager	Picnicking	Manager	Sightseeing
Laborer	Sightseeing	Laborer	Sightseeing

The most enjoyed activities were:

<u>Nonfarm</u>	<u>Enjoyment</u>	<u>Farm</u>	<u>Enjoyment</u>
Professional	Hunting	Professional	Picnicking
Manager	Sightseeing	Manager	Fishing
Laborer	Camping	Laborer	Camping

Of interest in both the analysis of activity participation and enjoyment, both nonfarm and farm Professionals, Managers and Laborers participated least in swimming and rated swimming as the least enjoyed activity.

III. The third section of the analysis went one step beyond the previous section. That is, having identified the various water based outdoor recreation participation rates and ranking for each occupational level for both nonfarm and farm samples, efforts were then made to first determine if or what activities and enjoyment levels correlated with which reservoirs of the Weber Basin Project.

Thus correlations were identified with each reservoir, and centered on somewhat related activities. The next logical step was then to conduct a

factor analysis on this area. That is, an examination was made of the total correlations, to ascertain if any commonalities existed with reference to actual activities and levels of enjoyment by both the nonfarm and farm sample.

The nonfarm sample clusters were located on two fairly distinct areas, when activities at reservoirs were considered. That is, water-skiing, boating and swimming had highest weighting in one factor, or could be grouped as activities on the water. A second factor was found, with camping, picnicking, fishing and sightseeing clustered or grouped as activity by the water.

The farm sample procedures were undertaken, with one factor identifying waterskiing, swimming and boating or activities on the water, in terms of actual activities undertaken. A second factor emerged with camping, fishing and picnicking or activities by the water. A third factor surfaced, with the highest weighting being hunting, in addition to the other two main groups.

The factor analysis for enjoyment levels was also undertaken. The nonfarm loadings for enjoyment levels clustered on camping, picnicking and hunting or activities by the water. This was followed by a second factor of waterskiing, boating and swimming or activities on the water. A third factor surfaced with a high weighting, which was sightseeing.

The levels of enjoyment for the farm sample identified one factor with enjoyment in waterskiing and boating for activities on the water. A second factor was found with highest weightings on camping, picnicking and fishing

or activities by the water. A third factor, hunting was also identified by the farm sample.

The separate high loading of enjoyment of sightseeing by the non-farm sample and of hunting by the farm sample warrants further consideration at this point.

A somewhat related finding surfaced earlier in the analyses. That is, the nonfarm sample enjoyed recreation activities at home, in addition to other recreation activities. The farm sample respondents had high participation in equipment sports and travel activities, and almost no participation in recreation at home. This was attributed to possible "spill-over" aspects of the overall differences between the two samples, the nonfarm and farm influences.

The factor analysis previously noted suggests that the separate high loading for sightseeing by the nonfarm sample may indicate the more passive, less physical, approach to recreation. On the other hand, the high loading for hunting by the farm sample and activity in equipment sports noted earlier, seems to suggest the "spill-over" effect in the participation of recreation activities.

Conclusions

The overall research efforts in this study have brought to surface several interesting and pertinent observations concerning different occupational categories and orientation of leisure, as well as participation in

outdoor recreation activities and the enjoyment of such activities. The emphasis and attempt of the study has been to show the similarity as well as differences between Professional, Manager and Laborer respondents of the two samples with respect to leisure orientation, participation and enjoyment of outdoor recreation activities.

One initial insight gained is confirmation of findings of other research cited earlier, concerning the nonfarm respondents having higher leisure orientations than the farm respondents. In addition, the fact that the Laborer respondents from both samples had the highest orientations for their particular sample may suggest that the make-up of their occupations could lend more toward leisure time activities. Owens (1970) found the Professionals to have high leisure orientations, with Managers and Laborers lower. It is important to note again however, that all three occupational groups in this current research had fairly close leisure orientations, in both nonfarm and farm samples. This again suggests an empirical confirmation of Berger's (1960) views that leisure needs to be considered in a normative context, with leisure being fairly important in the lives of all individuals. Thus it is the similarity of the leisure orientations that seems to be important in the current research effort.

A cross check was used by examining the hours of leisure time available by each occupational subgroup for a typical work day. This did not add particular insight with respect to leisure orientation, with the exception that

the respondents of the nonfarm sample had more hours of leisure time available than the respondents of the farm sample.

The fact, however, that Laborers were more leisure oriented than Professionals may be confirmation of Orzack's (1959) pioneering works on the role of work in the lives of professionals. He found that work was in fact a "central life interest" for the professionals he studied. Thus the Laborers may value work less, as Dubin (1956) found, and therefore value leisure more. The Professionals, on the other hand, may find work more satisfying and leisure less so.

The respondents, regardless of sample or occupation, preferred and participated most in water based outdoor recreation, by an overwhelming percentage. The nonfarm sample also showed a higher preference than the farm sample for recreation activity in the yard or at home. This could be a reflection of the common stereotype of an "urban" and "rural" distinction. This fact is somewhat documented in this study due to a higher activity and expressed enjoyment by occupational categories for the farm sample for both equipment sports and travel activity. Thus the emphasis is for very active, out and away activities. The nonfarm breakdown was less inclined in this direction, with some preferring recreation at home. This seems to be the confirmation noted earlier, of Wilensky's (1960) views that day-to-day work activities can "spill-over" into the non-work area.

With respect to the participation in water-based outdoor recreation activities, basic patterns emerged. Overall, it seems that there are possibly

more similarities than differences with respect to participation in water-based outdoor recreation activities for the two samples. The nonfarm sample respondents are somewhat more heterogeneous in recreation pursuits than are their farm respondent counterparts. Also there seems to be fairly close rates of participation for the Professional, Manager and Laborer respondents for both samples, but the farm subgroup as a whole participated less.

Another distinct finding was the low participation and enjoyment of swimming by both samples and subgroups, farm and nonfarm. The data in the study were supplied by head of house, and thus swimming may not be participated in as much by the household heads as by the children. Obviously, it seems that swimming is just not a preferred or enjoyed outdoor recreation activity in the lives of these respondents.

The picture that emerges in this study has been one of a participant who is very actively involved in water-based recreation activities and who experiences high enjoyment levels in such leisure time pursuits. In many activities, the participation and levels of enjoyment by various occupations have been identical. Thus emerging the influence of easy access to similar kinds of facilities and recreation areas by all groups, classes and masses. Another factor may be the interrelationships of activities that can take place when at a reservoir. A camping activity can quite easily involve fishing, swimming, boating, waterskiing, etc., and may thus be somewhat difficult to distinguish.

For this very reason the correlation and factor analysis disclosed two main groupings of activities. One was a grouping of participation activities which were seen as taking place on the water and another group-participation of activities taking place by the water. The same grouping emerged for the enjoyment of the various activities.

Of particular interest is the emergence of a third factor for both the nonfarm and farm samples, in addition to the enjoyment of activities on and by the water.

The nonfarm sample also had high enjoyment for sightseeing, while the farm sample had high enjoyment for hunting. This would seem to underscore the conclusion noted earlier of the difference between these two groups. The distinction again seems to be one of somewhat contrasting preference and life style. The nonfarm sample appears to be more passive in recreation than the farm sample, although they participate more. They enjoy recreation at home and also place high enjoyment on sightseeing at the reservoir. The farm sample on the other hand does not enjoy recreation at home, but prefers equipment related sports activity and travel, and importantly, has high enjoyment for hunting at the reservoir.

Thus, this research effort has found differences as well as similarities between occupational subgroups of the nonfarm and farm sample. There seems to be close similarity between the occupational subgroups in both samples with respect to leisure orientation and outdoor recreation activity. The differences that emerged are between the nonfarm and farm sample respondents. The

nonfarm respondents are more leisure oriented and participate more in outdoor recreation, but are less active in their recreation than the farm respondents. The farm respondents on the other hand are less leisure oriented, and participate less than the nonfarm respondents, but are more active physically in their approach to outdoor recreation.

Consideration for Future Research

Two considerations seem to be evident that should be present in future related research. One possible area needing more consideration is a more subjective analysis as to why water related activities seem to be so dominant in the lives of residents in Northern Utah. Of the multitude of activities available for recreation, the water-based activities take precedence. Thus probings into the more subjective reasonings and preferences might be useful to determine the reasons for such high interest.

A second consideration for future research that would be beneficial would be to replicate this study in an area where there was little or limited access to water-based recreation activities. This effort may help underscore the importance of access to facilities as an influence in what individuals want to do with their leisure time pursuits.

Limitations of this Study

Two limitations are noted with this study. The first limitation relates to the accessibility notion previously mentioned. That is, the ease

toward various forms of water-based recreation limits the generalization of this study. The Weber Basin Project offers good, close facilities which provide several forms of recreation simultaneously. Thus similar results may not be obtained with respect to occupation if these facilities were not as available.

Second, due to the small size of the nonfarm and farm samples initially, a breakdown into sub-categories, such as occupation, may limit the representative nature of the sub-categories.

BIBLIOGRAPHY

- Andrews, Wade H., Madsen, Gary E., and Dunaway, William C. 1973. "Leisure and Environmental Orientation of Farmers, Part-time Farmers, and Non-farmers." Paper prepared for the Annual Meetings of the Rural Sociological Society.
- Andrews, Wade H., Madsen, Gary E., and Legaz, Gregor J. 1974. Social Impacts of Water Resources Developments and their Implications for Urban and Rural Development: A Post-Audit Analysis of the Weber Basin Project in Utah. Institute for Social Science Research on Natural Resources, Utah State University, Logan, Utah.
- Berger, Bennett. 1962. "The Sociology of Leisure: Some Suggestions." Industrial Relations, Vol. 1, No. 2, February, pp. 31-45.
- Burdge, Rabel J. 1961a. "The Development of a Leisure Orientation Scale." Unpublished Masters Thesis, Ohio State University, Columbus, Ohio.
- Burdge, Rabel J. 1961b. "Rural-Urban Differences in Leisure Orientation." Paper presented at the Rural Sociological Society Meetings, Ames, Iowa. August 27-29.
- Burdge, Rabel J. 1969. "Levels of Occupational Prestige and Leisure Activity." Journal of Leisure Research, Vol. 3, Summer, pp. 262-274.
- Burdge, Rabel J. 1973. "A Summary of Sociological Studies of Water Resources Dealing with Social Goals and the Quality of Life: 'The Strawman' and Other Studies." In Proceedings of the Conference of University Council on Water Resources. Wade H. Andrews et al. (eds.), Utah State University, Logan, Utah, July 10-12, pp. 75-88.
- Charlesworth, James C. (ed.). 1964. "Leisure in America, Blessing or Curse?" Monograph No. 4, American Academy of Political and Social Science, April.
- Cheek, Neil H. 1971. "Toward a Sociology of Not-Work." Pacific Sociological Review, Vol. 14, No. 3, July, pp. 245-258.
- Cheek, Neil H., and Burch, William R. Jr. 1976. The Social Organization of Leisure in Human Society. New York: Harper and Row Publishers.

- Clark, Alfred. 1956. "The Use of Leisure and its Relation to Levels of Occupational Prestige." American Sociological Review, Vol. 21, June, pp. 301-307.
- Clawson, Marion. 1964. "How Much Leisure, Now and in the Future." In Leisure in America: Blessing or Curse? Monograph No. 4, American Academy of Political and Social Science, April, pp. 1-20.
- Clawson, Marion, and Knetsch, Jack L. 1966. Economics of Outdoor Recreation. Baltimore, Maryland: The Johns Hopkins Press.
- Crandall, Rich, Altengarten, S. M., Carson, S. M., Nolan, M. M., and Dixon, J. T. 1977. "A General Bibliography of Leisure Publications." Journal of Leisure Research, Vol. 9, No. 1, pp. 6-14.
- Cunningham, David A., Montoye, Henry J., Metzner, Helen L., and Keller, Jacob B. 1970. "Active Leisure Activities as Related to Occupation." Journal of Leisure Research, Vol. 2, No. 2, Spring, pp. 104-111.
- Danford, Howard G. 1953. Recreation in the American Community. New York: Harper and Row.
- Davis, Kinsley. 1949. Human Society. New York: Macmillan.
- de Grazia, Sebastian. 1962. Of Time, Work and Leisure. New York: The Twentieth Century Fund.
- Dierker, Michael William. 1977. "The Cache County Snowmobiler: An Empirical Study." Unpublished Masters Thesis, Utah State University, Logan, Utah.
- Dubin, Robert. 1956. "Industrial Worker's Worlds: A Study of the Central Life Interests of Industrial Workers." Social Problems, Vol. 3, No. 3, January, pp. 131-141.
- Dumazedier, Joffre. 1974. Sociology of Leisure. New York: Elsevier Scientific Publishing Company.
- Gerstl, Joel. 1961. "Leisure, Taste and Occupational Millieu." Social Problems, Vol. 9, Summer, pp. 56-68.
- Green, Arnold W. 1964. Recreation, Leisure and Politics. New York: McGraw-Hill.

- Harry, Joseph. 1971. "Work and Leisure Situational Attitudes." Pacific Sociological Review, July, pp. 301-309.
- Havinghurst, Robert J., and Feigenbaum, Kenneth. 1959. "Leisure and Life Style." American Journal of Sociology, Vol. 64, January, pp. 396-404.
- Hendee, John C. 1969. "Rural-Urban Differences Reflected in Outdoor Recreation Participation." Journal of Leisure Research, Vol. 1, No. 4, Autumn, pp. 333-341.
- Hendee, John C. 1971. "Sociology and Applied Leisure Research." Pacific Sociological Review, July, pp. 360-368.
- Kando, Thomas M., and Summers, Worth C. 1971. "The Impact of Work on Leisure--Toward a Paradigm and Research Strategy." Pacific Sociological Review, July, pp. 310-327.
- Kaplan, Max. 1960. Leisure in America: A Social Inquiry. New York: Wiley.
- Kleemeier, Robert W. (ed.). 1961. Aging and Leisure. A Research Perspective into the Meaningful Use of Time. New York: Oxford University Press.
- Larrabee, Eric, and Meyersohn, Rolf (eds.). 1958. Mass Leisure. Glencoe, Illinois: Free Press.
- Lindsay, John J., and Ogle, Richard A. 1972. "Socioeconomic Patterns of Outdoor Recreation Use Near Urban Areas." Journal of Leisure Research, Vol. 4, Winter, pp. 19-24.
- Martin, Alexander Reid. 1975. "Leisure and Our Inner Resources." Parks and Recreation, Vol. 10, No. 3, March, pp. 1a-16a.
- Meyersohn, Rolf. 1969. "The Sociology of Leisure in the U.S.--Introduction and Bibliography, 1945-1965." Journal of Leisure Research, Vol. 1, No. 1, Winter, pp. 53-68.
- Neulinger, John, and Breit, Miranda. 1969. "Attitude Dimensions of Leisure." Journal of Leisure Research, Vol. 1, No. 3, Summer, pp. 255-261.
- Neulinger, John, and Raps, Charles S. 1972. "Leisure Attitudes of an Intellectual Elite." Journal of Leisure Research, Vol. 4, Summer, pp. 196-207.

- Nie, Norman H., Hull, Hadlai C., Jenkins, Jean G., Steinbrenner, Karin, and Bent, Dale H. 1975. SPSS: Statistical Package for the Social Sciences. New York: McGraw-Hill Book Company.
- Orzack, Louis H. 1959. "Work as a 'Central Life Interest' of Professionals." Social Problems, Vol. 7, No. 2, Fall, pp. 73-84.
- Outdoor Recreation Resource Review Commission. 1962. Outdoor Recreation Resource Review Commission Study. Washington, D. C.
- Outdoor Recreation for America: A Report to the President and to the Congress by the Outdoor Recreation Resource Review Commission. 1962. January. Washington, D. C.
- Owens, Gerald P. 1970. Outdoor Recreation: Participation, Characteristics of Users, Distances Traveled and Expenditures. Ohio Agricultural Research and Development Center, Wooster, Ohio. Research Bulletin 1033, April.
- Parker, Stanley R. 1971. The Future of Work and Leisure. New York: Praeger Publishers.
- Richardson, Reid C., and Peery, Joseph S. 1966. Recreation in Utah. Salt Lake City, Utah: Bureau of Economic and Business Research, College of Business, University of Utah.
- Riesman, David. 1958. "Work and Leisure in Post-Industrial Society." In Mass Leisure. Eric Larrabee and Rolf Meyersohn (eds.). Glencoe, Illinois: Free Press. pp. 363-385.
- Sessoms, H. Douglas, and Oakley, Sidney R. 1969. "Recreation, Leisure and the Alcoholic." Journal of Leisure Research, Vol. 1, No. 1, Winter, pp. 21-32.
- Shafer, Elwood L. 1976. "Today's Decisions and Tomorrow's Leisure Environment." Parks and Recreation, Vol. 11, No. 6, June, pp. 15, 48-49.
- Spreitzer, Elma A., and Snyder, Eldon E. 1974. "Work Orientation, Meaning of Leisure and Mental Health." Journal of Leisure Research, Vol. 6, Summer, pp. 207-219.
- Weiss, Robert S., and Riesman, David. 1961. "Some Issues in the Future of Leisure." Social Problems, Vol. 9, No. 1, pp. 78-85.

- White, Terrence H. 1975. "The Relative Importance of Education and Income as Predictors on Outdoor Recreation Participation." Journal of Leisure Research, Vol. 7, No. 3, pp. 191-199.
- Wilensky, Harold L. 1960. "Work, Careers, and Social Integration." International Social Science Journal, Vol. 12, pp. 543-560.
- Wilensky, Harold L. 1961. "The Uneven Distribution of Leisure." Social Problems, Vol. 9, Summer, pp. 32-56.
- Yoesting, Dean R., Warren, Richard D., and Burkhead, Dan L. 1971. "Leisure Orientation Scale--Replication and Measurement Analysis." Paper presented at the Rural Sociological Society Meeting, Denver, Colorado.
- Zelman, Walter A. 1976. "The Sports People Play." Parks and Recreation, Vol. 2, No. 2, February, pp. 27-29, 36-38.
- Zuzanek, Jiri. 1974. "Society of Leisure or the Harried Leisure Class? Leisure Trends in Industrial Societies." Journal of Leisure Research, Vol. 6, Fall, pp. 293-304.

APPENDIX

Schedule # _____ Date of Interview _____
City or County _____ Interviewer _____
Sample Segment _____

WATER RESOURCE DEVELOPMENT ON THE WEBER BASIN

A POST AUDIT ANALYSIS

A Project of the Institute for Social Science
Research on Natural Resources and
the Center for Water Resources Research

UTAH STATE UNIVERSITY

Logan, Utah

Respondent's Name _____ Deck Number _____
Address _____ Schedule Number _____
Name of Local Area _____ Sample Area _____

WATER RESOURCE DEVELOPMENT ON THE WEBER BASIN

A POST AUDIT ANALYSIS

I am with Utah State University which is conducting a study of water resource developments in this area. It is primarily concerned with the public use of water resources including such things as home, farm and recreation uses.

All the information received from you is strictly confidential. Your cooperation will be greatly appreciated.

1. How many years in total have you lived in either Weber, Davis, or Morgan Counties? _____ years

(8-9)

2. Approximately how long have you lived in your present home? _____ years

(10-11)

3. (USE CARD 1) Here is a list of several of the uses which have been made of the natural water resources within the Weber Basin Area. Please rank them in order of their importance.

- ___ 0. NA
___ 1. DNA
___ 2. DK
___ 3. 1st
___ 4. 2nd
___ 5. 3rd
___ 6. 4th

CARD SHOWS:

1. Irrigation Water for Agriculture
2. Industrial Water Supply
3. Household and Municipal Water Supply
4. Public water based Recreational Areas

(12)

4. As we just mentioned, public recreational facilities are provided in water resource development projects. Who do you feel should pay the costs of operation and maintenance of these public recreational areas? (CARD 2)

- ___ 0. NA
___ 1. DK
___ 2. Only the recreationists who use the areas, through their entrance fees or user fees.
___ 3. All tax payers through their state taxes.
___ 4. All tax payers through their federal taxes.
___ 5. Combination of fees and state taxes
___ 6. Combination of fees and state taxes
___ 7. Combination of state and federal taxes
___ 8. All three--fees; state; and federal taxes

(13)

5. IF RESPONDENT ANSWERED #4 ABOVE WITH EITHER A "5", "6", or "8", ASK:
What share or percentage of the costs do you feel user or entrance fees should contribute? _____%

(14-15-16)

PREFERRED LEISURE ACTIVITIES

6. Given your present income and responsibilities, what outdoor recreational activity would you most like to do if you had 3 hours of additional time?

(17-18)

7. Now imagine for a moment that you had three days off in a row. Given your present income and responsibilities, what outdoor recreation activity would you like to do most during this additional time?

(19-20)

8. We are also interested in what activities you actually engage in. What outdoor recreation activity do you participate in most during a whole year? Second most?

1. _____

(21-22)

2. _____

(23-24)

WATER BASED OUTDOOR RECREATION ACTIVITIES

(CARD 3) Here is a listing of several outdoor recreation activities which are often associated with water resources such as lakes or reservoirs. In this part of the interview we will discuss several aspects of your participation in these activities. Please look over the list and on Card 3-A.

Have you ever participated in any of the following activities? (CODE: 0=NA, 1=yes, 2=no)

This past 12 months which of the following responses best describe how often you have participated in this water based activity? (USE CARD 3-B)

- 1 = I have been going on a regular basis, i.e., about once a week or more during the season.
 2 = I have gone several times during the season, i.e., four, five or six times.
 3 = I have gone only a few times, i.e., two or three times during the season.
 4 = I have seldom gone, i.e., one time, during the season

- 5 = I have not participated in this activity this past year (past 12 months)
 6 = I have not participated in this activity since 1961.

(IF "0" or "6", GO TO NEXT ACTIVITY)

FISHING AT A LAKE/RESERVOIR	SWIMMING AT A LAKE/RESERVOIR	WATER FOWL HUNTING	BOATING AND/OR CANOEING	WATER SKIING	PICNICKING AT LAKE/RESERVOIR	CAMPING AT LAKE/RESERVOIR	SIGHTSEEING AT LAKE
25	49	73	25	49	73	24	48
26	50	74	26	50	74	25	49

On a five point scale with 1 showing the least enjoyment and 5 the most, how would you rate this activity? (USE CARD 3-C)

(NOTE: CODE 0=NA, 8=DK, 9=DNA)

Since 1961 has your participation in this activity:

0. NA
1. Increased considerably (GO TO #15)
2. Increased somewhat
3. Remained the same (GO TO NEXT ACTIVITY)
4. Decreased somewhat (GO TO #13)
5. Decreased considerably
6. DNA

IF CHANGE IN FREQUENCY IS A DECREASE):

We would like to know the reasons for this change in your level of participation in this activity since 1961. (USE CARD 4-A)
Select all the responses that apply.
(NOTE: CODE 0=NA, 1=yes, 2=no, 9=DNA)

1. Family not interested.
2. Friends not interested.
3. Lack of available facilities at recreation areas, i.e., parking restrooms, etc.
4. Lack of finances, too expensive.
5. Adequate transportation not as available.
6. Lack of leisure time.
7. Age (too young or too old).
8. Water areas too far away.
9. Other: (SPECIFY) _____

Of these, which one is the most important?

(RECORD NUMBER AS LISTED ABOVE UNDER 13)

FISHING AT A LAKE/RESERVOIR	SWIMMING AT A LAKE/RESERVOIR	WATERFOWL HUNTING	BOATING AND/OR CANOEING AT A LAKE	WATER SKIING	PICNICKING AT A LAKE/RESERVOIR	CAMPING AT A LAKE/RESERVOIR	SIGHTSEEING AT A LAKE/RESERVOIR
27	51	75	27	51	75	26	50
28	52	76	28	52	76	27	51

FISHING	SWIMMING	WATERFOWL HUNTING	BOATING	WATER SKIING	PICNICKING	CAMPING	SIGHTSEEING
29	53	77	29	53	77	28	52
		75					
		8			75		
					8		
38	62	14	38	62	13	37	61

CHANGE IN FREQUENCY IS AN INCREASE:)

The following are reasons for increasing activity. Select all the responses that apply. (CARD 4-B)

(NOTE: CODE 0 =NA, 1=Yes, 2=No, 9=DNA)

1. Family became more interested.
2. Friends became more interested.
3. More available facilities at recreation areas such as tables, restrooms, etc.
4. Increase in personal finances.
5. Adequate transportation became more available.
6. Enough leisure time has become available.
7. Age (individuals became old enough).
8. Water areas developed which are closer.
9. Other (SPECIFY): _____

Fishing	Swimming	Hunting	Boating	Water Skiing	Picnicking	Camping	Sightseeing
39	63	15	39	63	14	38	62
48	72	24	48	72	23	47	71

Of these, which one is the most important?
(RECORD NUMBER AS LISTED ABOVE UNDER #15)

Which of the water related activities that we have been discussion (i.e., fishing, swimming water fowl hunting, water skiing, boating, picnicking, or camping at a lake) do you participate in most during a typical year?

(INTERVIEWER SHOULD RECORD ACTIVITY IN BLAND SEMANTIC DIFFERENTIAL QUESTION #59 BEFORE ASKING NEXT QUESTION.
EG. "FISHING" RECORD FISHERMAN, "HUNTING=HUNTER, ETC.)

0. NA,DK
1. DNA
2. Fishing
3. Water Fowl Hunting
4. Swimming

5. Water Skiing
6. Boating and Canoeing
7. Picnicking at a Lake
8. Camping at a Lake
9. Sightseeing to a lake

(DECK IV)

13

When you decide to participate in this activity which one of the following people are you more likely to take into consideration in makin your recreation plans? (CARD 5)

01. A friend
02. A member of my work group
03. A fellow church member
04. A fellow lodge or club member
05. My spouse
06. My children
07. Another relative
08. Other (SPECIFY): _____
09. NA, DK, DNA

(14-15)

ATTITUDES TOWARD LEISURE ACTIVITIES

142

The next few statements express different ways a person may feel about leisure activity. Please select the answer which best describes the way you feel about each: Strongly Agree, Agree, Undecided, Disagree, or Strongly Disagree. (CARD 6)

19. Frankly speaking, much of the time work is pretty dull, but leisure makes life worthwhile.

5. SA 4. A 3. U 2. D 1. SD 0. NA

(16)

20. I generally feel guilty when I enjoy leisure for more than a short time.

1. SA 2. A 3. U 4. D 5. SD 0. NA

(17)

21. Today most people spend too much time just enjoying themselves.

1. SA 2. A 3. U 4. D 5. SD 0. NA

(18)

22. I sometimes feel guilty when I'm on vacation because I'm not working.

1. SA 2. A 3. U 4. D 5. SD 0. NA

(19)

23. I generally get more enjoyment out of leisure activities than I do out of work activities.

5. SA 4. A 3. U 2. D 1. SD 0. NA

(20)

24. Generally speaking the main satisfaction I get out of life is working.

1. SA 2. A 3. U 4. D 5. SD 0. NA

(21)

25. How would it affect your enjoyment of life if you were no longer able to participate in recreational activities in natural outdoor settings that you now participate in?

___ 00. NA

___ 01. DK

___ 02. DNA

___ 03. It would extremely increase my enjoyment of life. (ASK WHY?)

___ 04. It would greatly increase my enjoyment of life. (ASK WHY?)

___ 05. It would moderately increase my enjoyment of life. (ASK WHY?)

___ 06. It would slightly increase my enjoyment of life. (ASK WHY?)

___ 07. It would make no difference.

___ 08. It would slightly decrease my enjoyment of life.

___ 09. It would moderately decrease my enjoyment of life.

___ 10. It would greatly decrease my enjoyment of life.

___ 11. It would extremely decrease my enjoyment of life.

(22-23)

26. How would it affect your enjoyment of life if you were no longer able to participate in any water related recreational activities that you now participate in?

___ 00. NA
 ___ 01. DK
 ___ 02. DNA
 ___ 03. It would extremely increase my enjoyment of life. (ASK WHY?)
 ___ 04. It would greatly increase my enjoyment of life. (ASK WHY?)
 ___ 05. It would moderately increase my enjoyment of life. (ASK WHY?)
 ___ 06. It would slightly increase my enjoyment of life. (ASK WHY?)
 ___ 07. It would make no difference.
 ___ 08. It would slightly decrease my enjoyment of life.
 ___ 09. It would moderately decrease my enjoyment of life.
 ___ 10. It would greatly decrease my enjoyment of life.
 ___ 11. It would extremely decrease my enjoyment of life.

(24-25)

27. Do you own a boat of any kind? (CARD 7-A)

___ 0. NA
 ___ 1. No
 ___ 2. Sailboat
 ___ 3. Rowboat
 ___ 4. Motorboat
 ___ 5. Canoe
 ___ 6. Kayak
 ___ 7. Rubber raft
 ___ 8. Other

(26)

28. (IF MOTORBOAT) Do you use it for water skiing?

___ 0. NA
 ___ 1. DK
 ___ 2. DNA
 ___ 3. Yes
 ___ 4. No

(27)

29. What other major outdoor recreational equipment do you own? (CARD 7-B)

___ 00. NA, DK
 ___ 01. None
 ___ 02. Truck camper
 ___ 03. Trailer camper
 ___ 04. Cabin
 ___ 05. Horses
 ___ 06. Snowmobile
 ___ 07. Four-wheel drive vehicle
 ___ 08. Motorbike
 ___ 09. Other

(28-29)

30. How many times in the past 5 years have you had a fishing license? _____ times (IF "0" TIMES, SKIPT TO "RESERVOIR PARTICIPATION" TOP OF NEXT PAGE)

(30)

31. If you look at fishing enjoyment as having only two elements, based on a total of 100%, what percentage of your enjoyment of fishing depends on the beauty of the setting you fish in, & what percentage depends on success; that is, the number of fish caught? _____ % (Beauty of the setting)

(31-32-33)

32. What lake or reservoir in Utah do you prefer to go to fish? 2nd choice?

1. _____
 2. _____

(34-35)

33. What local streams in Utah do you prefer to fish?

1. _____
 2. _____

(36-37)

(38-39)

We would now like to ask a few questions concerning your possible use of several reservoirs within the state of Utah. (USE CARD 8-A)

a. How many total times over the last 3 years have you visited for non-working purposes each reservoir.

b. Total number of visits this June, July, August for non-working purposes?

a. Fishing trips this June, July,
August?

(1) With whom (USE CARD 7-B)

0=NA	4=Immediate
1=DNA	family and
2=Self only	or spouse
3=Friends	5=Other relatives
	6=organized group
	7=Other

[illegible]

NOTE: CODE EACH "With whom?" QUESTION
AS:

0 = NA
1 = DNA
2 = Self only
3 = Friends
4 = Immediate family and
or spouse
5 = Other relatives
6 = Organized group
7 = Other

Lake Powell

(2) Total size of typical group?

[illegible]

We would like to know your attitudes toward the following statements. Please select one of the five choices. (SEE CARD 9)

44. The so called evils of water pollution are greatly exaggerated by many people:
1. SA 2. A 3. U 4. D 5. SD 0. NA
(60)
45. People should not be allowed to build homes next to streams if they contribute to the pollution:
5. SA 4. A 3. U 2. D 1. SD 0. NA
(61)
46. Economic development is of first importance and therefore no resource should be restricted from economic use.
1. SA 2. A 3. U 4. D 5. SD 0. NA
(62)

47. The ill effects of pesticides on the environment cannot be emphasized too much.

5. SA 4. A 3. U 2. D 1. SD 0. NA

(63)

48. People should not be allowed to build homes next to streams because they often destroy the beauty of the streams.

5. SA 4. A 3. U 2. D 1. SD 0. NA

(64)

49. Official wilderness areas that are set aside for permanent preservation should prohibit all future use or development of any kind such as mining minerals and water storage.

5. SA 4. A 3. U 2. D 1. SD 0. NA

(65)

50. Not enough emphasis is being placed on the beautification and improvement of areas around large constructed reservoirs.

5. SA 4. A 3. U 2. D 1. SD 0. NA

(66)

51. Our natural environment has deteriorated to a great extent in the last few years.

5. SA 4. A 3. U 2. D 1. SD 0. NA

(67)

52. I feel that livestock or farm animals are not generally major polluters of streams in the western United States.

1. SA 2. A 3. U 4. D 5. SD 0. NA

(68)

SEMANTIC DIFFERENTIAL

The purpose of this part of the questionnaire is to measure the meaning of certain words by having people judge them according to selected word pairs. Please make your judgements on the basis of what the key word means to you. There are no right or wrong answers---the only thing that is important to us is that your judgements are based on your first impressions or feelings about the key word described by the selected word pairs listed below it.* Don't worry or puzzle over any of these judgements. Remember it's your first impression that counts. Make your judgements as quickly as you can, but at a comfortable pace for you. Here's an example of how to judge the key words. (USE CARD 10)

*(INTERVIEWER SHOULD REFER TO CARD WITH EXAMPLES LISTED, BRIEFLY CHECKING THE RESPONDENT'S UNDERSTANDING OF THE USE OF THE RATING. EXPLAIN IN OWN WORDS IF NECESSARY. TELL RESPONDENT TO: BE SURE TO MAKE A CHECK MARK FOR EACH WORD PAIRS GIVEN ON A LINE.)

53. FRIENDS

- a. wise _____ : _____ : _____ : _____ : _____ : _____ : _____ foolish _____
- b. soft _____ : _____ : _____ : _____ : _____ : _____ : _____ hard _____
- c. fast _____ : _____ : _____ : _____ : _____ : _____ : _____ slow _____
- d. ugly _____ : _____ : _____ : _____ : _____ : _____ : _____ beautiful _____
- e. strong _____ : _____ : _____ : _____ : _____ : _____ : _____ weak _____
- f. calm _____ : _____ : _____ : _____ : _____ : _____ : _____ excitable _____
- g. successful _____ : _____ : _____ : _____ : _____ : _____ : _____ unsuccessful _____
- h. youthful _____ : _____ : _____ : _____ : _____ : _____ : _____ mature _____
- i. rash _____ : _____ : _____ : _____ : _____ : _____ : _____ cautious _____
- j. cruel _____ : _____ : _____ : _____ : _____ : _____ : _____ kind _____

54. MYSELF

- a. wise _____ : _____ : _____ : _____ : _____ : _____ : _____ foolish _____
- b. soft _____ : _____ : _____ : _____ : _____ : _____ : _____ hard _____
- c. fast _____ : _____ : _____ : _____ : _____ : _____ : _____ slow _____
- d. ugly _____ : _____ : _____ : _____ : _____ : _____ : _____ beautiful _____
- e. strong _____ : _____ : _____ : _____ : _____ : _____ : _____ weak _____
- f. calm _____ : _____ : _____ : _____ : _____ : _____ : _____ excitable _____
- g. successful _____ : _____ : _____ : _____ : _____ : _____ : _____ unsuccessful _____
- h. youthful _____ : _____ : _____ : _____ : _____ : _____ : _____ mature _____
- i. rash _____ : _____ : _____ : _____ : _____ : _____ : _____ cautious _____
- j. cruel _____ : _____ : _____ : _____ : _____ : _____ : _____ kind _____

55. FAMILY

- a. wise : : : : : : : foolish _____
- b. soft : : : : : : : hard _____
- c. fast : : : : : : : slow _____
- d. ugly : : : : : : : beautiful _____
- e. strong : : : : : : : weak _____
- f. calm : : : : : : : excitable _____
- g. successful : : : : : : : unsuccessful _____
- h. youthful : : : : : : : mature _____
- i. rash : : : : : : : cautious _____
- j. cruel : : : : : : : kind _____

56. WORK-GROUP

- a. wise _____ : _____ : _____ : _____ : _____ : _____ : _____ foolish _____
- b. soft _____ : _____ : _____ : _____ : _____ : _____ : _____ hard _____
- c. fast _____ : _____ : _____ : _____ : _____ : _____ : _____ slow _____
- d. ugly _____ : _____ : _____ : _____ : _____ : _____ : _____ beautiful _____
- e. strong _____ : _____ : _____ : _____ : _____ : _____ : _____ weak _____
- f. calm _____ : _____ : _____ : _____ : _____ : _____ : _____ excitable _____
- g. successful _____ : _____ : _____ : _____ : _____ : _____ : _____ unsuccessful _____
- h. youthful _____ : _____ : _____ : _____ : _____ : _____ : _____ mature _____
- i. rash _____ : _____ : _____ : _____ : _____ : _____ : _____ cautious _____
- j. cruel _____ : _____ : _____ : _____ : _____ : _____ : _____ kind _____

57. CHURCH GROUP

- a. wise ____ : ____ : ____ : ____ : ____ : ____ : ____ foolish ____
- b. soft ____ : ____ : ____ : ____ : ____ : ____ : ____ hard ____
- c. fast ____ : ____ : ____ : ____ : ____ : ____ : ____ slow ____
- d. ugly ____ : ____ : ____ : ____ : ____ : ____ : ____ beautiful ____
- e. strong ____ : ____ : ____ : ____ : ____ : ____ : ____ weak ____
- f. calm ____ : ____ : ____ : ____ : ____ : ____ : ____ excitable ____
- g. successful ____ : ____ : ____ : ____ : ____ : ____ : ____ unsuccessful ____
- h. youthful ____ : ____ : ____ : ____ : ____ : ____ : ____ mature ____
- i. rash ____ : ____ : ____ : ____ : ____ : ____ : ____ cautious ____
- j. cruel ____ : ____ : ____ : ____ : ____ : ____ : ____ kind ____

58. _____

- a. wise _____:_____:_____:_____:_____:_____ foolish _____
- b. soft _____:_____:_____:_____:_____:_____ hard _____
- c. fast _____:_____:_____:_____:_____:_____ slow _____
- d. ugly _____:_____:_____:_____:_____:_____ beautiful _____
- e. strong _____:_____:_____:_____:_____:_____ weak _____
- f. calm _____:_____:_____:_____:_____:_____ excitable _____
- g. successful _____:_____:_____:_____:_____:_____ unsuccessful _____
- h. youthful _____:_____:_____:_____:_____:_____ mature _____
- i. rash _____:_____:_____:_____:_____:_____ cautious _____
- j. cruel _____:_____:_____:_____:_____:_____ kind _____

59. What groups, clubs or organizations do you belong to? (WE NEED INFORMATION ONLY ON THE RESPONDENT.)

We are thinking of organizations such as: Lodges, Civic, Educational, Religious, and Neighborhood Groups. (DO NOT INCLUDE PROFESSIONAL GROUPS, UNIONS, OR ANY NON-VOLUNTARY GROUPS.)

[illegible]

REFERENCE GROUPS

155

60. Many people turn to others for advice on certain matters. As I read a list of problems on which you might seek advice, would you tell me which type of person you would turn to first.

- ___ 1. Finding a job
 ___ 2. Buying a car or truck
 ___ 3. Planning a vacation trip
 ___ 4. Deciding upon a leisure time activity
 ___ 5. Solving a family problem

CODE:

0=NA	6 = Neighbors	60-1	___
1=DNA	7 = Clergy		(51)
2=Professional counselors	8 = Other (Specify)	60-2	___
3=Individual family members			(52)
4=Relatives		60-3	___
5=Work Buddies			(53)
		60-4	___
			(54)
		60-5	___
			(55)

LAWN AND GARDENING PRACTICES

We would now like to ask you some questions regarding your lawn and garden if you have them. (NOTE: NOT FOR LARGE APARTMENT DWELLERS, IF RESPONDENT HAS NO LAWN, FLOWER OR GEGETABLE GARDEN, SKIPT TO #69.)

61. Do you use irrigation water (not drinkable tap water) to water a lawn, flower garden or vegetable garden?

(a) LAWN?	(b) FLOWER GARDEN?	(c) VEGETABLE GARDEN	61-a	___
___ 0. NA	___ 0. NA	___ 0. NA		(56)
___ 1. DNA	___ 1. DNA	___ 1. DNA	61-b	___
___ 2. Yes	___ 2. Yes	___ 2. Yes		(57)
___ 3. No	___ 3. No	___ 3. No	61-c	___
				(58)
(d) IF RESPONDENT USES IRRIGATION WATER:			61-d	___
Who do you purchase this irrigation water from:				(59-60)

(IF RESPONDENT DOES NOT IRRIGATE AT ALL SKIP TO #66.)

62. Has more irrigation water become available to you on a regular basis in the last 10 years to use on your lawn and/or garden(s)?

☐ 0. NA ☐ 3. Yes
☐ 1. DNA ☐ 4. No
☐ 2. DK _____

(61)

(IF "YES" ABOVE:)

63. Has the availability of additional irrigation water affected your gardening practices or anything else similar to gardening?

☐ 0. NA ☐ 3. Yes (EXPLAIN) _____
☐ 1. DNA ☐ 4. No
☐ 2. DK _____

(62)

64. What degree of pleasure do you get from irrigating your lawn or garden(s)?

☐ 0. NA,DK ☐ 5. Little Pleasure
☐ 1. DNA ☐ 6. No Pleasure
☐ 2. Great Pleasure
☐ 3. Some Pleasure
☐ 4. Indifferent

(63)

65. To what extent has the use of irrigation water affected the beauty of the area around your home?

☐ 0. NA,DK ☐ 3. Much
☐ 1. DNA ☐ 4. Little
☐ 2. Very Much ☐ 5. None

(64)

66. Do you need additional irrigation water for use around the home?

☐ 0. NA ☐ 3. Yes
☐ 1. DNA ☐ 4. No
☐ 2. DK _____

(65)

67. Would you like to have irrigation water for use around the home?

☐ 0. NA ☐ 3. Yes
☐ 1. DNA ☐ 4. No
☐ 3. DK _____

(66)

68. (IF "YES" TO #67:) What use or uses would you make of it?

[Check all that apply] - USE CARD 12

☐ 00. NA ☐ 05. Flower garden
☐ 01. DNA ☐ 06. Fruit Trees
☐ 02. DK ☐ 07. Shrubs
☐ 03. Vegetable garden ☐ 08. Irrigated pasture
☐ 04. Lawns ☐ 09. Other _____

(67 - 68)

69. Do you operate a farm of any kind? 0. NA; 1. Yes; 2. No
(69)

FOR FARM OPERATORS ONLY

70. Is this your major occupation, that is, does it provide more than half of your annual income? 0. NA 1. DNA 2. Yes 3. No
(70)
71. How many years have you been farming full time? (Farming provided more than $\frac{1}{2}$ of total yearly income.) years
(71-72)
72. How many years total have you been farming part or full time? years
(73-74)
73. How many acres do you have in your total farm operation within Morgan, Davis and Weber Counties? acres
(75-76- 77- 78)
74. How many acres of farm land do you irrigate in Weber, Morgan and Davis Counties? acres
(9- 10- 11- 12)
- (IF DOES NOT IRRIGATE SKIP TO #78)
75. What type of irrigation system do you use?
 0. NA 3. Pressurized (sprinkler)
 1. DNA 4. Combination of ditch and pressure
 2. Ditch 5. Other
(13)
76. Do you use all the irrigation water that is made available to you?
 0. NA 1. DNA 2. DK 3. Yes 4. No
(14)
77. If "NO", Why not?

(15-16)
78. What is the source of this irrigation water, that is, which outfit supplies it?
(17-18- 19)
79. In the next 5 years is it likely that you will be obtaining additional irrigation water?
 0. NA 1. DNA 2. DK 3. Yes 4. No
(20)

FARM-LACK OF WATER

80. In about how many years of the last ten have you experienced a lack of irrigation water _____ years (21-22)
81. In about how many years of the last 20 have you experienced a lack of irrigation water? _____ years (23-24)
82. Which of the following words best describes the degree of anxiety or worry you have about a possible lack of irrigation water in the future?
- | | | |
|-------------|--------------|------------------|
| ____ 0. NA | ____ 2. DK | ____ 4. Low |
| ____ 1. DNA | ____ 3. None | ____ 5. Moderate |
| | ____ 6. High | |
- (25)

FARM-FLOODING

83. In how many years of the past 10 has there been flooding on property you manage within Weber, Morgan, and Davis Counties? _____ years (26-27)
84. In how many years of the past twenty has there been flooding on property you manage within Weber, Davis, and Morgan Counties? _____ years (28-29)
85. Which of the following words best describes the degree of anxiety or worry that you might have about flooding in the future?
- | | | |
|-------------|------------------|--------------|
| ____ 0. NA | ____ 3. None | ____ 6. High |
| ____ 1. DNA | ____ 4. Low | |
| ____ 2. DK | ____ 5. Moderate | |
- (30)
86. Has flooding ever hurt you financially? (On property in Morgan, Davis, or Weber Counties.)
- | | |
|-------------|-------------|
| ____ 0. NA | ____ 3. Yes |
| ____ 1. DNA | ____ 4. No |
| ____ 2. DK | |
- (31)
87. (IF "YES":) To what degree has it hurt you?
- | | |
|-----------------------------|-------------------------|
| ____ 0. NA | ____ 4. Less than \$500 |
| ____ 1. DNA | ____ 5. \$500-\$999 |
| ____ 2. DK | ____ 6. \$1,000-\$2,499 |
| ____ 3. Inconveniences only | ____ 7. \$2,500-\$3,999 |
| | ____ 8. \$4,000 or more |
- (32)

88. What effect(s) if any, has the water reclamation developments in the Weber Basin had on your farming practices during the past 10 years? (Or during the years that you have been farming if less than 10.)
(NOTE: ALLOW RESPONDENT TO ANSWER AND THEN PROBE FOR EITHER POSITIVE OR NEGATIVE EFFECTS IF RESPONDENT FAILED TO MENTION ANY.)

POSITIVE: 1. _____ (33- 34)
2. _____ (35- 36)

NEGATIVE: 1. _____ (37- 38)
2. _____ (39- 40)

WORK AND LEISURE TIME

Another area of interest ofr us is the work and leisure time activities of the various residents within the area.

89. Husband's or male head of household's major occupation: a. _____ (41 - 42)
- a. Job Title _____
- b. Brief Description _____ b. _____ (43 - 44)
- c. Name of Industry: _____ c. _____ (45 - 46)
- d. (OF EXECUTIVE, MANAGER OF OWNER OF A BUSINESS:) Which of the following comes closest to the value of the business? (USE CARD) d. _____ (47)
- | | |
|---------------------------------|-------------------------------------|
| ____ 0. NA | ____ 5. Between \$6,000-\$34,999 |
| ____ 1. DK | ____ 6. Between \$35,000-\$99,999 |
| ____ 2. DNA | ____ 7. Between \$100,000-\$499,999 |
| ____ 3. Less than \$3,000 | ____ 8. Over \$500,000 |
| ____ 4. Between \$3,000-\$5,999 | |

90. Male head's part-time occupation: (CODE DNA AS "01")

a. Job Title _____ a. _____ (48-49)

b. Brief Description _____ b. _____ (50-51)

c. Name of industry: _____ c. _____ (52-53)

91. How many days a week do you work in a typical week?

- | | |
|------------------------------------|---------------------------|
| <u> </u> 0. 0 days (don't work) | <u> </u> 5. five days |
| <u> </u> 1. one day | <u> </u> 6. six days |
| <u> </u> 2. two days | <u> </u> 7. seven days |
| <u> </u> 3. three days | <u> </u> 8. NA, DK |
| <u> </u> 4. four days | <u> </u> 9. DNA |

(54)

92. How many hours a day do you work in a typical work day? _____ hours

(55 -56)

93. What day(s) do you generally get off from work each week?

- | | |
|--------------------------------|---|
| <u> </u> 00. NA | <u> </u> 09. Sunday only |
| <u> </u> 01. DNA | <u> </u> 10. Saturday and Sunday |
| <u> </u> 02. DK | <u> </u> 11. Saturday and Friday |
| <u> </u> 03. Monday only | <u> </u> 12. Sunday and Monday |
| <u> </u> 04. Tuesday only | <u> </u> 13. Sat. or Sun. plus 1 other |
| <u> </u> 05. Wednesday only | <u> </u> week day not connected |
| <u> </u> 06. Thursday only | <u> </u> 14. 3 consecutive days |
| <u> </u> 07. Friday only | <u> </u> 15. 3 days each week but |
| <u> </u> 08. Saturday only | <u> </u> not consecutive days |
| | <u> </u> 16. Other _____ |

(57-58)

94. On a typical work day, approximately how many hours of leisure time do you generally have? _____ hours

(59-60)

95. Wife's major occupation:

- a. Job Title _____
- b. Brief Description _____
- c. Name of Industry _____
- d. (IF EXECUTIVE, MANAGER OR OWNER OF A BUSINESS) Which of the following comes closest to the value of the business? (CARD 13)

a. (61-62)

b. (63-64)

c. (65-66)

- | | | |
|--|--|----------|
| <u> </u> 0. NA | <u> </u> 5. Between \$6,000-\$34,999 | d. _____ |
| <u> </u> 1. DK | <u> </u> 6. Between \$35,000-\$99,999 | (67) |
| <u> </u> 2. DNA | <u> </u> 7. Between \$100,000-\$499,999 | |
| <u> </u> 3. Less than \$3,000 | <u> </u> 8. Over \$500,000 | |
| <u> </u> 4. Between \$3,000-\$5,999 | | |

96. Wife's part-time occupation:

- a. Job Title _____
- b. Brief Description _____
- c. Name of Industry _____

a. (68-69)

b. (70-71)

c. (72-73)

97. How many days a week does your wife work in a typical work week? (NOTE: FOR THIS AND THE FOLLOWING 3 QUESTIONS THE WIFE MUST BE EMPLOYED FOR WAGES, SCORE HOUSEWIVES AS "DNA".)

(74)

- | | |
|---|--|
| <input type="checkbox"/> 0. 0 days (don't work) | <input type="checkbox"/> 5. five days |
| <input type="checkbox"/> 1. one day | <input type="checkbox"/> 6. six days |
| <input type="checkbox"/> 2. two days | <input type="checkbox"/> 7. seven days |
| <input type="checkbox"/> 3. three days | <input type="checkbox"/> 8. NA, DK |
| <input type="checkbox"/> 4. four days | <input type="checkbox"/> 9. DNA |

98. How many hours a day does your wife work in a typical work day? _____ hours.

(75 -76)

99. What days does your wife normally get off from work?

- | | |
|---|---|
| <input type="checkbox"/> 00. NA | <input type="checkbox"/> 09. Sunday only |
| <input type="checkbox"/> 01. DNA | <input type="checkbox"/> 10. Saturday and Sunday |
| <input type="checkbox"/> 02. DK | <input type="checkbox"/> 11. Saturday and Friday |
| <input type="checkbox"/> 03. Monday only | <input type="checkbox"/> 12. Sunday and Monday |
| <input type="checkbox"/> 04. Tuesday only | <input type="checkbox"/> 13. Sat. or Sun. plus 1 other week day not connected |
| <input type="checkbox"/> 05. Wednesday only | <input type="checkbox"/> 14. 3 consecutive days |
| <input type="checkbox"/> 06. Thursday only | <input type="checkbox"/> 15. 3 days each week but not consecutive days |
| <input type="checkbox"/> 07. Friday only | <input type="checkbox"/> 16. Other _____ |
| <input type="checkbox"/> 08. Saturday only | |

(77- 78)

100. On a typical work day, approximately how many hours of leisure time does your wife normally have? _____ hours

(79-80)

DEMOGRAPHIC INFORMATION

Finally for statistical purposes we would like to ask these questions about you and your family.

101. Would you mind giving me the year of your birth? _____

(13- 14)

102. Present marital status?

- | |
|---|
| <input type="checkbox"/> 0. NA |
| <input type="checkbox"/> 1. Separated or divorced |
| <input type="checkbox"/> 2. Widowed |
| <input type="checkbox"/> 3. Never married |
| <input type="checkbox"/> 4. Married |

103. What was the last grade of school you and your spouse completed?

A. Husband or Male Head

B. Wife or Female Head

A. _____
(16)

- ___ 0. NA
___ 1. Graduate Degree, (MA, MS, MD, Ph.D., LLD, etc.)
___ 2. 4 year college graduate
___ 3. 1 - 3 years college
___ 4. Business or trade school
___ 5. High school graduate
___ 6. 10-11 years of school
___ 7. 7-9 years of school
___ 8. less than 7 years
___ 9. DNA

- ___ 0. NA
___ 1. Graduate Degree (MA, MD, Ph.d., LLD, etc.)
___ 2. 4 year college graduate
___ 3. 1-3 years college
___ 4. Business or trade school
___ 5. High school graduate
___ 6. 10-11 years of school B. _____
___ 7. 7-9 years of school (17)
___ 8. Less than 7 years
___ 9. DNA

104. How many living children do you have? _____

(18-19)

A. (IF CHILDREN) How many of these live at home at least 8 months of the year? _____

A. _____
(20-21)

B. (IF CHILDREN) How many of these are under 4 years of age?

B. _____
(22)

105. Are you buying or renting a home?

- ___ 0. NA
___ 1. Renting
___ 2. Buying or own

106. Would you please rate the community where you now live on each of the following: (USE CARD 14)

	Excellent	Good	Fair	Poor
1. As a place to raise a family	()	()	()	()
2. As a place with adequate health and medical facilities	()	()	()	()
3. Quality of schools	()	()	()	()
4. Adequacy of water supply	()	()	()	()
5. Quality of water supply	()	()	()	()
6. Recreational opportunities	()	()	()	()
7. Protection from flooding and other natural calamities	()	()	()	()
8. Opportunities for cultural refinement (theater, art, etc.)	()	()	()	()
9. Opportunity for earning a liveable income	()	()	()	()
10. Effectiveness of local and county governments in meeting community problems	()	()	()	()

107. Concerning each of the items we have discussed, would you say the the situation in the last ten years in this community is getting better, about the same as it has always been, or getting worse?
(USE CARD 14-B)

	Getting Better	About the same	Getting Worse	
1. As a place to raise a family	()	()	()	
2. As a place with adequate health and medical facil.	()	()	()	(23)
3. Quality of schools	()	()	()	
4. Adequacy of water supply	()	()	()	
5. Quality of water supply	()	()	()	
6. Recreational opportunities	()	()	()	
7. Protection from flooding and other natural calamities	()	()	()	
8. Opportunities for cultural refinement (theater, art, etc.	()	()	()	
9. Opportunity for earning a liveable income.	()	()	()	
10. Effectiveness of local and county government in meeting community problems	()	()	()	

108. (USE CARD 15) Taking into consideration all sources of income for you and your spouse which category on this card represents your total income before taxes in 1971 (last year)?

<u> </u> 0. NA OR DK	<u> </u> 5. \$9,000-\$11,999	(24)
<u> </u> 1. Under \$3,000	<u> </u> 6. \$12,000-\$14,999	
<u> </u> 2. \$3,000-\$4,999	<u> </u> 7. \$15,000-\$19,999	
<u> </u> 3. \$5,000-\$6,999	<u> </u> 8. \$20,000-\$24,999	
<u> </u> 4. \$7,000-\$8,999	<u> </u> 9. \$25,000 and over	

109. Sex of respondent:

<u> </u> 1. Male	(25)
<u> </u> 2. Female	

110. Type of structure in which family lives:

- ☐ 1. trailer or mobile home
☐ 2. detached single family home
☐ 3. 2 to 3 family apartment house or row
☐ 4. detached 2 to 4 family house (apartments in old house)
☐ 5. row house (4 or more units in an attached row)
☐ 6. apartment house (4 or more units in an attached row)
☐ 7. apartment in partly commercial structure
☐ 8. other (specify) _____

111. Describe conditions of respondent's home, yard and neighborhood.

	0 has none	1 poor or low	2 fair	3 Average	4 good or above average	5 very good or high	
A. overall							(27)
B. lawns							(28)
C. flower gardens							(29)
D. shade and ornamental trees							(30)
E. house exterior							(31)
F. house interior							(32)
G. Neighborhood rating							(33)
H. Value category of house							(34)

VITA

S. Craig Campbell

Candidate for the Degree of

Doctor of Philosophy

Dissertation: Leisure Orientations and Outdoor Recreation Participation
of Selected Occupational Groups in Utah

Major Field: Sociology

Biographical Information:

Personal Data: Born at Preston, Idaho, December 2, 1942,
son of Sidney Weldon and Maude E. Davis Campbell;
married Kari Gundersen, April 26, 1968; three
children--Nancy, Karin and Julie.

Education: Attended elementary school in Moses Lake, Washington;
graduated from Moses Lake High School in 1961; gradu-
ated from United States Military Intelligence School,
Baltimore, Maryland, 1964; received Bachelor of Science
degree from University of Washington, with major in
Building Technology, 1971; received Master of Arts
degree from Ball State University, majoring in Counseling
Psychology, 1974; completed requirements for the Doctor
of Philosophy degree, specializing in Social Psychology,
at Utah State University in 1979.

Professional Experience: 1974 to 1977, research assistant, Institute
for Social Science Research on Natural Resources, Utah
State University; 1977 teaching assistant, Utah State Uni-
versity; 1978-1979, part-time instructor, Sociology De-
partment, Weber State College; 1978 to Present,
Psychologist at Weber County Mental Health, Ogden,
Utah.